

ORDER NO.MKE0309803C1

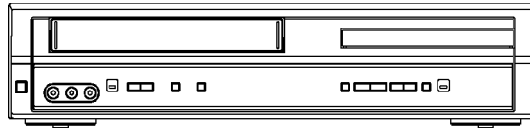
B3

Service Manual

DVD VIDEO PLAYER/ VIDEO CASSETTE REORDER

PV-D734S / PV-D744S

ORIGINAL MFR'S VERSION A



⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

1. CAUTION

THIS DIGITAL VIDEO PLAYER EMPLOYS A LASER SYSTEM.

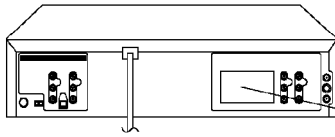
TO ENSURE PROPER USE OF THIS PRODUCT, PLEASE READ THIS SERVICE MANUAL CAREFULLY AND RETAIN FOR FUTURE REFERENCE. SHOULD THE UNIT REQUIRE MAINTENANCE, CONTACT AN AUTHORIZED SERVICE LOCATION-SEE SERVICE PROCEDURE.

USE OF CONTROLS, ADJUSTMENTS OR THE PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

TO PREVENT DIRECT EXPOSURE TO LASER BEAM, DO NOT TRY TO OPEN THE ENCLOSURE. VISIBLE LASER RADIATION MAY BE PRESENT WHEN THE ENCLOSURE IS OPENED. DO NOT STARE INTO BEAM.

Location of the required Marking

The rating sheet and the safety caution are on the rear of the unit.



CERTIFICATION: COMPLIES WITH FDA
RADIATION PERFORMANCE STANDARDS,
21 CFR SUBCHAPTER J.

2. IMPORTANT SERVICE SAFETY INFORMATION

Operating the receiver outside of its cabinet or with its back removed involves a shock hazard. Work on these models should only be performed by those who are thoroughly familiar with precautions necessary when working on high voltage equipment.

Exercise care when servicing this chassis with power applied. Many B plus and high voltage RF terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis.

Maintain interconnecting ground lead connections between chassis, escutcheon, picture tube dag and tuner cluster when operating the chassis.

These receivers have a "polarized" AC line cord. The AC plug is designed to fit into standard AC outlets in one direction only. The wide blade connects to the "ground side" and the narrow blade connects to the "hot side" of the AC line. This assures that the TV receiver is properly grounded to the house wiring. If an extension cord must be used, make sure it is of the "polarized" type. Since the chassis of this receiver is connected to one side of the AC supply during operation, service should not be attempted by anyone not familiar with the precautions necessary when working on these types of equipment.

When it is necessary to make measurements or tests with AC power applied to the receiver chassis, an Isolation Transformer must be used as a safety precaution and to prevent possible damage to transistors. The Isolation Transformer should be connected between the TV line cord plug and the AC power outlet.

Certain HV failures can increase X-ray radiation. Receivers should not be operated with HV levels exceeding the specified rating for their chassis type. The maximum operating HV specified for the chassis used in these receivers is $22\text{kV} \pm 1.0\text{kV}$ at zero beam current with a line voltage of 120V AC. Higher voltage may also increase the possibility of failure in the HV supply.

It is important to maintain specified values of all components in the horizontal and high voltage circuits and anywhere else in the receiver that could cause a rise in high voltage, or operating supply voltages. No changes should be made to the original design of the receiver.

Components shown in the shaded areas on the schematic diagram and/or identified by ⚠ in the replacement parts list should be replaced only with exact factory recommended replacement parts. The use of unauthorized substitute parts may create shock, fire, X-ray radiation, or other hazards.

To determine the presence of high voltage, use an accurate high impedance HV meter connected between the second anode lead and the CRT dag grounding device. When servicing the High Voltage System, remove static charges from it by connecting a 10kohm resistor in series with an insulated wire (such as a test probe) between the picture tube dag and 2nd anode lead (have AC line cord disconnected from AC supply).

The picture tube used in this receiver employs integral implosion protection. Replace with a tube of the same type number for continued safety. Do not lift picture tube by the neck. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage completely. Keep others without shatterproof goggles away.

When removing springs or spring mounted parts from the tuner, tuner cluster or chassis, shatterproof goggles must be worn. Keep others without shatterproof goggles away. Before returning the receiver to the user, perform the following safety checks:

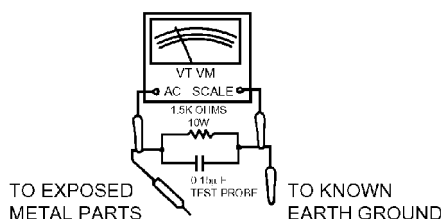
1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Replace all protective devices such as nonmetallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, a check for the presence of leakage current should be made at each exposed metal part having a return path to the chassis (antenna, cabinet metal, screw heads, knobs and/or shafts, escutcheon, etc.) in the following manner.

Plug the AC line cord directly into a 120V AC receptacle.

(Do not use an Isolation Transformer during these checks.) All checks must be repeated with the AC line cord plug connection reversed. (If necessary, a nonpolarized adapter plug must be used only for the purpose of completing these checks.)

If available, measure current using an accurate leakage current tester. Any reading of 0.35mA or more is excessive and indicates a potential shock hazard which must be corrected before returning the receiver to the owner.

If a reliable leakage current tester is not available, this alternate method of measurement should be used. Using two clip leads, connect a 1500 ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with a known earth ground, such as a water pipe or conduit and the metal part to be checked. Use a VTVM or VOM with 1000 ohms per volt, or higher, sensitivity to measure this AC voltage drop across the resistor. Any reading of 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the receiver to the owner.



3. IMPORTANT SAFEGUARDS

4. TAPE REMOVAL METHOD AT NO POWER SUPPLY

1. Remove the Top Cabinet, Front Cabinet and DVD Block. (Refer to item 1 of the DISASSEMBLY INSTRUCTIONS.)

2. Remove the screw 1 of the Deck Chassis and remove the Loading Motor. (Refer to **Fig. 2**)
3. Rotate the Pinch Roller Cam in the direction of the arrow by hand to slacken the Video Tape.
4. Rotate the Clutch Ass'y either of the directions to wind the Video Tape in the Cassette Case.
5. Repeat the above step 3~4. Then take out the Video Cassette from the Deck Chassis. Be careful not to scratch on the tape.

Fig. 1

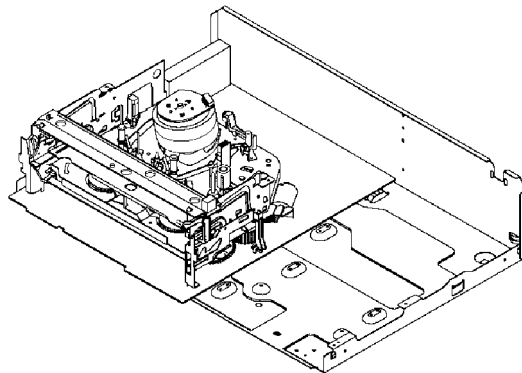
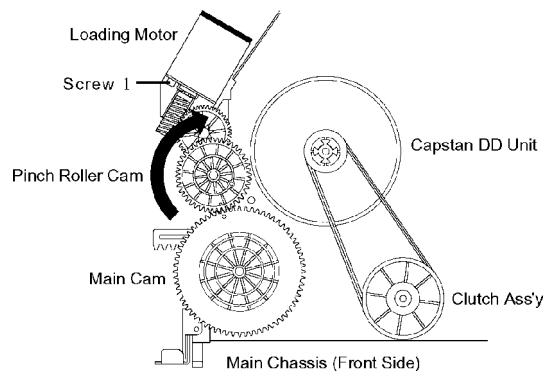


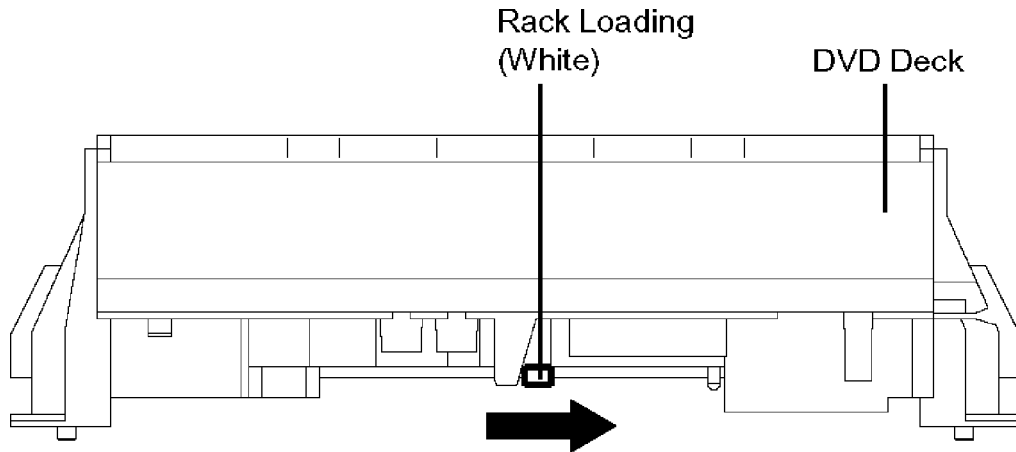
Fig. 2



5. DISC REMOVAL METHOD AT NO POWER SUPPLY

1. Remove the Top Cabinet and Front Cabinet.(Refer to item 1 of the DISASSEMBLY INSTRUCTIONS.)
2. Slide the Rack Loading (White) toward the arrow direction by using a minus driver to release the lock. (Refer to **Fig. 1**)
3. Draw the Tray.

Fig. 1



6. PARENTAL CONTROL - RATING LEVEL

4 DIGIT PASSWORD CANCELLATION

If the stored 4 digit password in the Rating Level menu needs to be cancelled, please follow the steps below.

- 1. Turn Unit ON.**
- 2. Press and hold the '7' key on the remote control unit.**
- 3. Simultaneously press and hold the 'STOP' key on the front panel.**
- 4. Hold both keys for more than 3 seconds.**
- 5. The On Screen Display message 'PASSWORD CLEAR' will appear.**
- 6. The 4 digit password has now been cleared.**

7. GENERAL SPECIFICATIONS

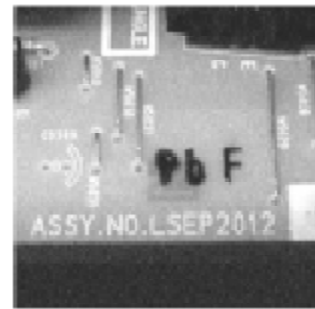
8. ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF stamp or printing on the PCB.
(Please refer to figures.)



Printed case



Stamped case

Caution:

- Pb free solder has a higher melting point than standard solder;
Typically the melting point is 50°F~70°F (30°C~40°C) higher.
Please use a soldering iron with temperature control and adjust it to 700°F ± 20°F (370°C ± 10°C).
In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F/ 600°C).
- All products with the printed circuit board with PbF stamp or printing must be serviced with lead free solder.
When soldering or unsoldering, completely remove all of the solder from the pins or solder area, and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

Recommendations

Recommended lead free solder composition is Sn96.5 Ag3.0 Cu0.5.

9. DISASSEMBLY INSTRUCTIONS

9.1. REMOVAL OF MECHANICAL PARTS AND P.C. BOARDS

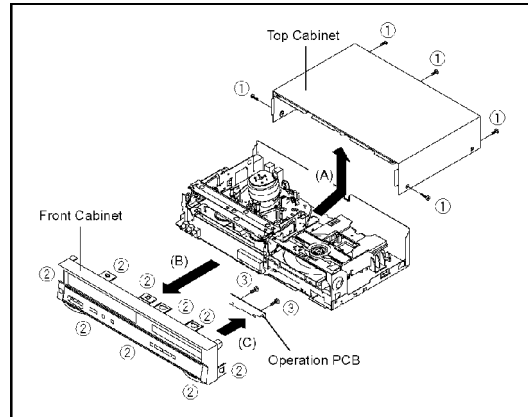
9.1.1. TOP CABINET AND FRONT CABINET (Refer to [Fig. 1-1](#))

1. Remove the 5 screws ①.
2. Remove the Top Cabinet in the direction of arrow (A).
3. Disconnect the following connector: (CP651).
4. Unlock the 9 supports ②.
5. Remove the Front Cabinet in the direction of arrow (B).

6. Remove the 2 screws ③.

7. Remove the Operation PCB in the direction of arrow (C).

Fig. 1-1

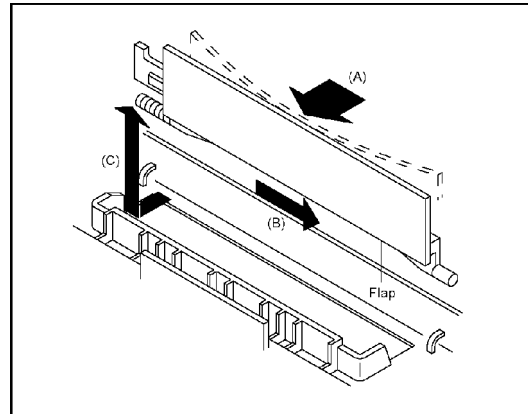


9.1.2. FLAP (Refer to Fig. 1-2)

1. Open Flap to 90° and flex in direction of arrow (A), at the same time slide in direction of arrow (B).

2. Then lift in direction of arrow (C).

Fig. 1-2



9.1.3. DVD DECK (Refer to Fig. 1-3)

1. Make the short circuit on the position as shown Fig. 1-3 using a soldering. If you remove the DVD Deck with no soldering, the Laser may be damaged.

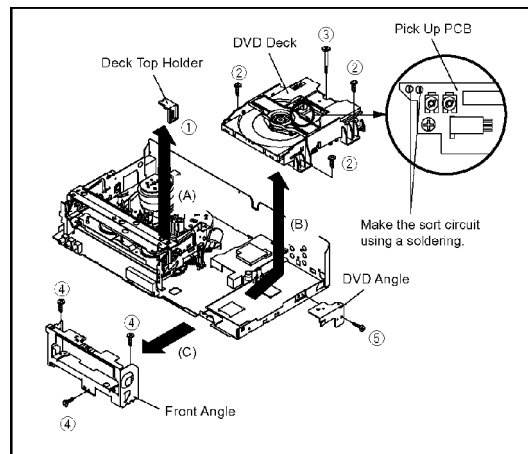
2. Unlock the support ① and remove the Deck Top Holder in the direction of arrow (A).

3. Remove the 3 screws ②.

4. Remove the screw ③.

5. Disconnect the following connectors: (CP2601, CP2602, CP2603).
6. Remove the DVD Deck in the direction of arrow (B).
7. Remove the 3 screws ④.
8. Remove the Front Angle in the direction of arrow (C).
9. Remove the screw ⑤.
10. Remove the DVD Angle.

Fig. 1-3



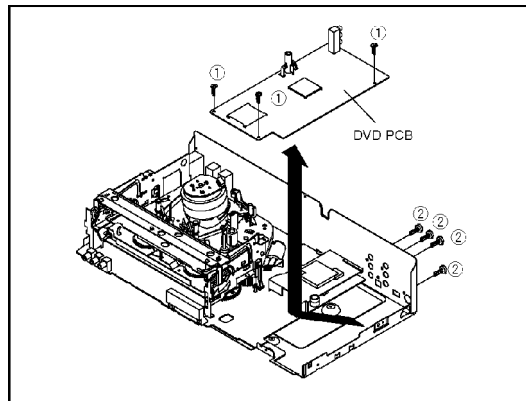
NOTE

When the installation of the DVD Deck, remove all the soldering on the short circuit position after the connection of Pick Up PCB and DVD PCB connector.

9.1.4. DVD PCB (Refer to [Fig. 1-4](#))

1. Remove the 3 screws ①.
2. Remove the 4 screws ②.
3. Disconnect the following connectors: (CP4002 and CP8102).
4. Remove the DVD PCB in the direction of arrow.

Fig. 1-4



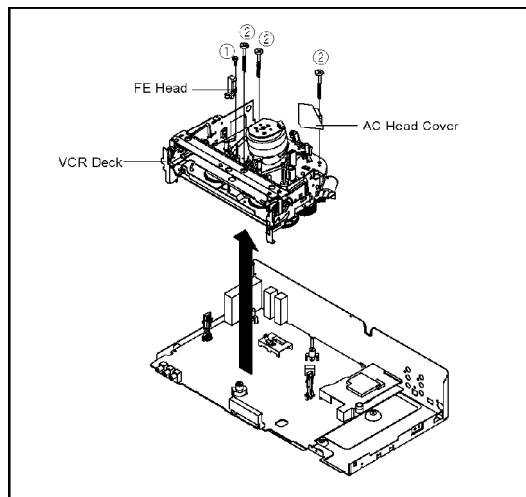
9.1.5. VCR DECK (Refer to **Fig. 1-5**)

NOTE

Do not remove the cable at the FE Head section. The FE Head may be damaged if you remove the cable by force.

1. Move the Cassette Holder Ass'y to the back side.
2. Remove the screw ①.
3. Remove the FE Head.
4. Remove the 3 screws ②.
5. Disconnect the following connectors: (CP101, CP102, and CP3001).
6. Remove the AC Head Cover and VCR Deck in the direction of arrow.

Fig. 1-5

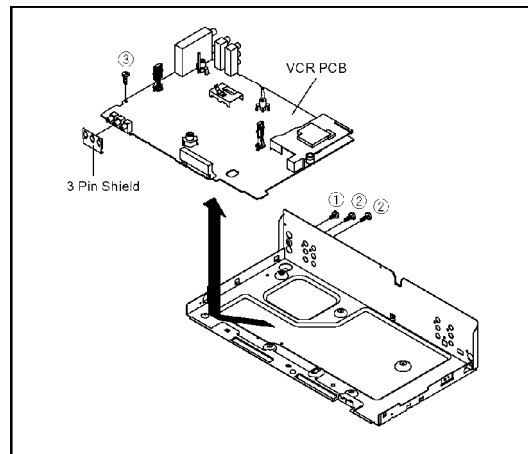


9.1.6. VCR PCB (Refer to **Fig. 1-6**)

1. Remove the screw ①.

2. Remove the 2 screws ②.
3. Remove the screw ③.
4. Remove the 3 Pin Shield.
5. Remove the VCR PCB in the direction of arrow.

Fig. 1-6



9.2. REMOVAL OF VCR DECK PARTS

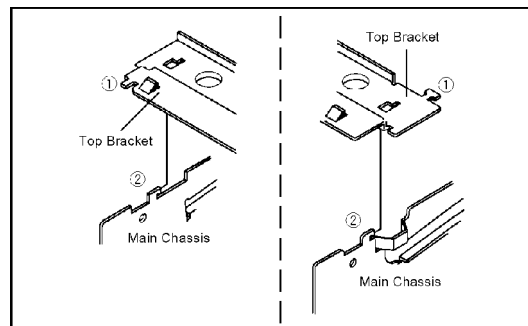
9.2.1. TOP BRACKET (Refer to Fig. 2-1)

1. Extend the 2 supports ①.
2. Slide the 2 supports ② and remove the Top Bracket.

NOTE

1. After the installation of the Top Bracket, bend the support ① so that the Top Bracket is fixed.

Fig. 2-1

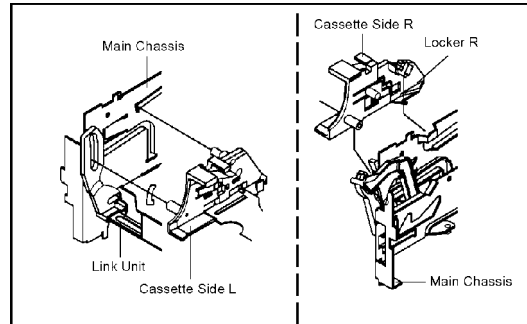


9.2.2. CASSETTE HOLDER ASS'Y (Refer to Fig. 2-2)

1. Move the Cassette Holder Ass'y to the front side.

2. Push the Locker R to remove the Cassette Side R.
3. Remove the Cassette Side L.

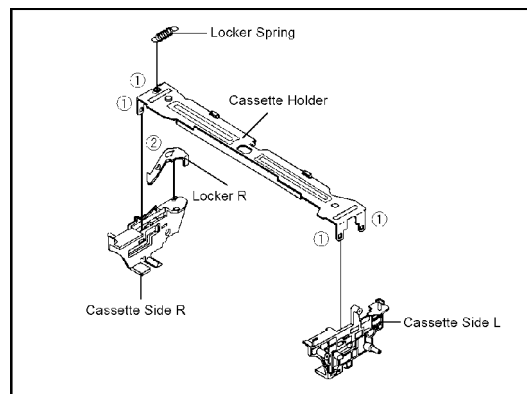
Fig. 2-2



9.2.3. CASSETTE SIDE L/R (Refer to **Fig. 2-3-A**)

1. Remove the Locker Spring.
2. Unlock the 4 supports ① and then remove the Cassette Side L/R.
3. Unlock the support ② and then remove the Locker R.

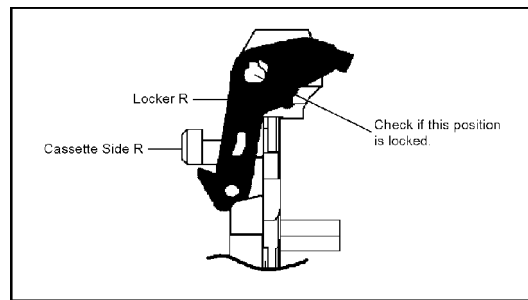
Fig. 2-3-A



NOTE

1. In case of the Locker R installation, check if the one position of **Fig. 2-3-B** are correctly locked.
2. When you install the Cassette Side R, be sure to move the Locker R after installing.

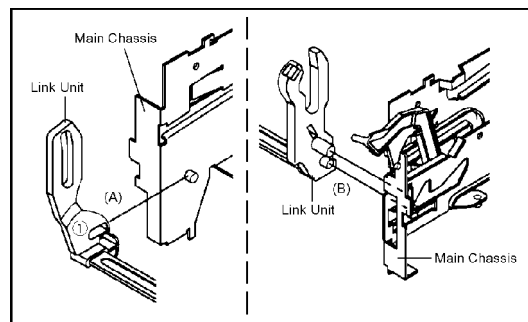
Fig. 2-3-B



9.2.4. LINK UNIT (Refer to [Fig. 2-4](#))

1. Set the Link Unit to the Eject position.
2. Unlock the support ①.
3. Remove the (A) side of the Link Unit first, then remove the (B) side.

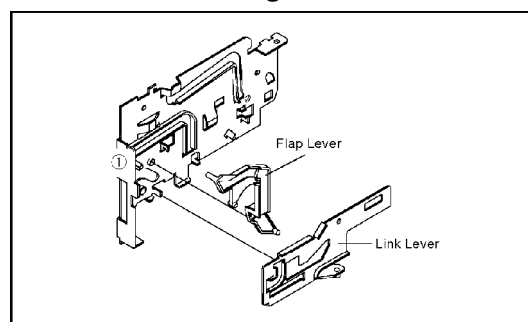
Fig. 2-4



9.2.5. LINK LEVER/FLAP LEVER (Refer to [Fig. 2-5](#))

1. Extend the support ①.
2. Remove the Link Lever.
3. Remove the Flap Lever.

Fig. 2-5

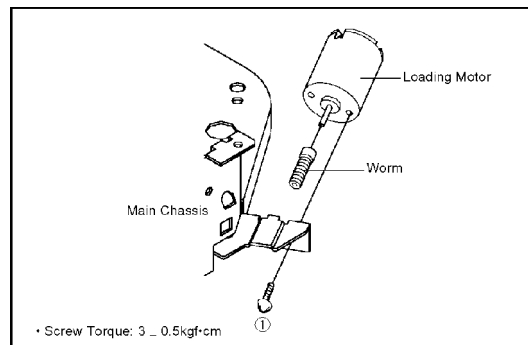


9.2.6. LOADING MOTOR/WORM (Refer to [Fig. 2-6-A](#))

1. Remove the screw ①.
2. Remove the Loading Motor.

3. Remove the Worm.

Fig. 2-6-A



NOTE

1. In case of the Worm installation, check if the value of the [Fig. 2-6-B](#) is correct.
2. In case of the Loading Motor installation, hook the wire on the Cassette Opener as shown [Fig. 2-6-C](#).
3. When installing the wires between Capstan DD Unit and Loading Motor, connect them correctly as shown [Fig. 2-6-D](#).

Fig. 2-6-B

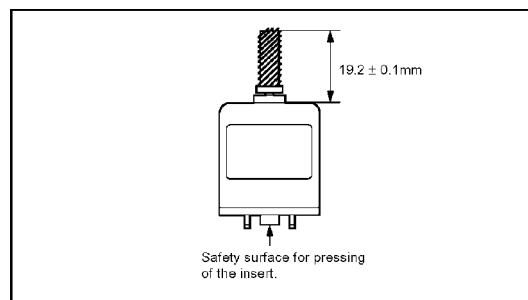


Fig. 2-6-C

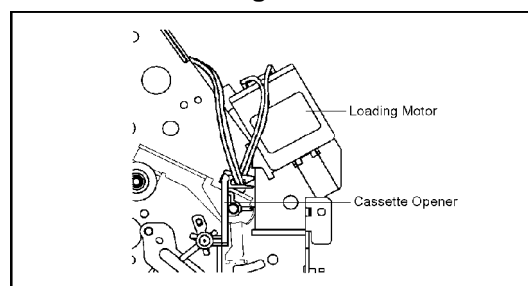
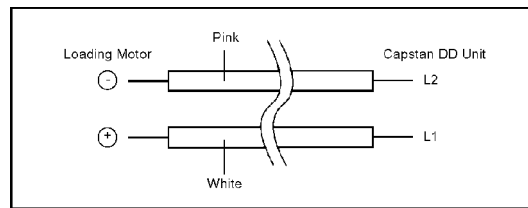


Fig. 2-6-D



9.2.7. TENSION ASS'Y (Refer to **Fig. 2-7-B**)

1. Turn the Pinch Roller Cam clockwise so that the Tension Holder hook is set to the position of **Fig. 2-7-A** to move the Tension Arm Ass'y.
2. Remove the Tension Spring.
3. Unlock the 2 supports ① and remove the Tension Band.
4. Unlock the support ② and remove the Tension Arm Ass'y.
5. Unlock the support ③ and remove the Tension Connect.
6. Float the hook ④ and turn it clockwise then remove the Tension Holder.

Fig. 2-7-A

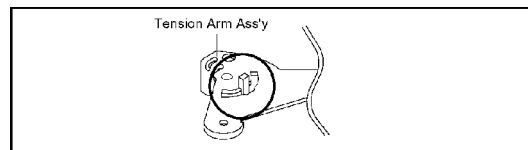
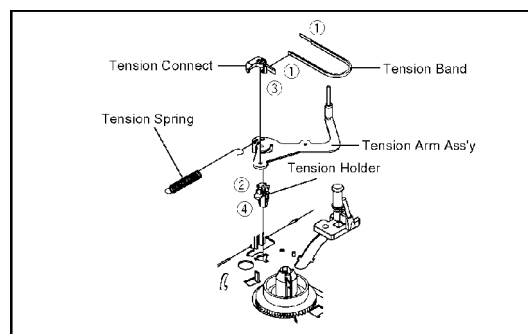


Fig. 2-7-B



NOTE

1. In case of the Tension Band installation, note the direction of the installation. (Refer to **Fig. 2-7-C**)
2. In case of the Tension Band installation, install correctly as **Fig. 2-7-D** .
3. In case of the Tension Connect installation, install as the circled section of **Fig. 2-7-E** .

Fig. 2-7-C

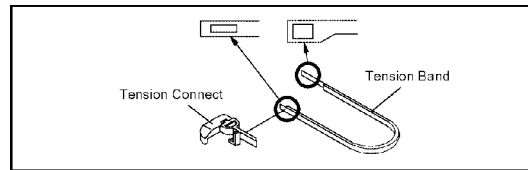


Fig. 2-7-D

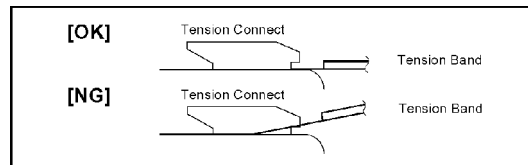
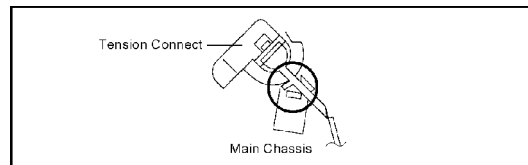


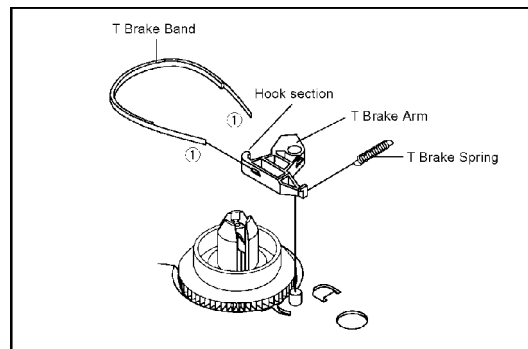
Fig. 2-7-E



9.2.8. T BRAKE ARM/T BRAKE BAND (Refer to [Fig. 2-8-A](#))

- 1. Remove the T Brake Spring.**
- 2. Turn the T Brake Arm clockwise and bend the hook section to remove it.**
- 3. Unlock the 2 supports ① and remove the T Brake Band.**

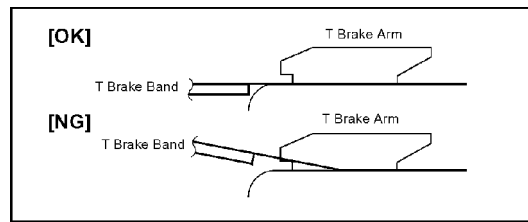
Fig. 2-8-A



NOTE

- 1. In case of the T Brake Band installation, install correctly as [Fig. 2-8-B](#)**

Fig. 2-8-B



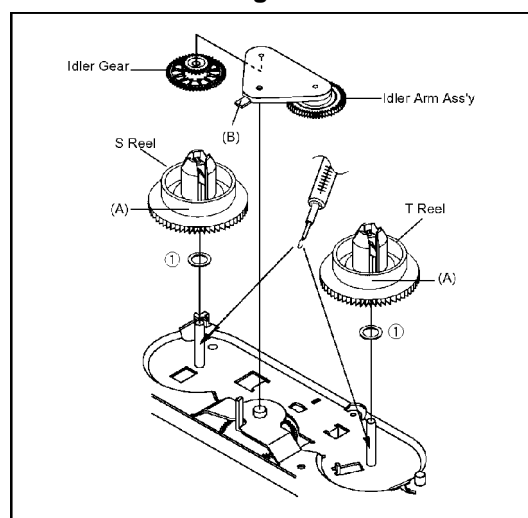
9.2.9. S REEL/T REEL/IDLER ARM ASS'Y/IDLER GEAR (Refer to [Fig. 2-9-A](#))

1. Remove the S Reel and T Reel.
2. Remove the 2 Polyslider Washers ①.
3. Remove the Idler Arm Ass'y and Idler Gear.

NOTE

1. Take care not to damage the gears of the S Reel and T Reel.
2. The Polyslider Washer may be remained on the back of the reel.
3. Take care not to damage the shaft.
4. Do not touch the section "A" of S Reel and T Reel. (Use gloves.)
(Refer to [Fig. 2-9-A](#)) Do not adhere the stains on it.
5. When you install the reel, clean the shaft and grease it (FG-84M).
(If you do not grease, noise may be heard in FF/REW mode.)
6. After installing the reel, adjust the height of the reel. (Refer to MECHANICAL ADJUSTMENT)

Fig. 2-9-A



NOTE

1. In case of the S Reel and T Reel installation, check if the correct parts are installed. (Refer to **Fig. 2-9-B**)
2. In case of the Idler Arm Ass'y installation, install correctly as **Fig. 2-9-C** . And also set it so that the section "B" of **Fig. 2-9-A** is placed under the Main Chassis tab.

Fig. 2-9-B

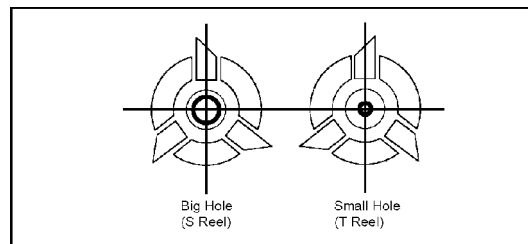
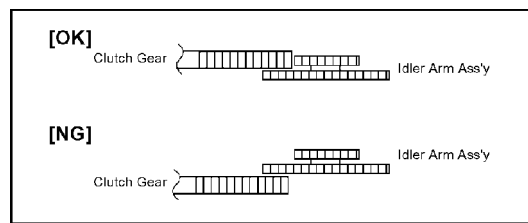


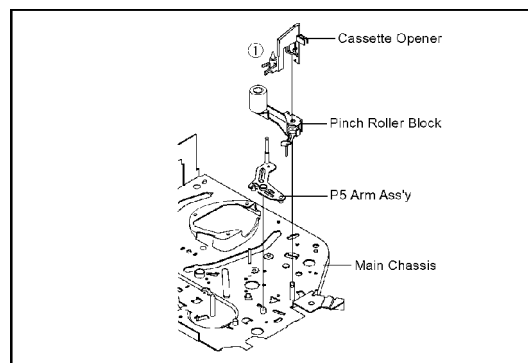
Fig. 2-9-C



9.2.10. CASSETTE OPENER / PINCH ROLLER BLOCK / P5 ARM ASS'Y (Refer to **Fig. 2-10-A**)

1. Unlock the support ① and remove the Cassette Opener.
2. Remove the Pinch Roller Block and P5 Arm Ass'y.

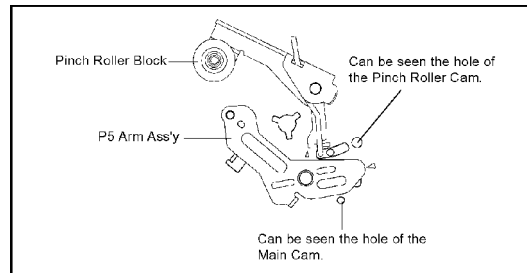
Fig. 2-10-A



NOTE

1. Do not touch the Pinch Roller. (Use gloves.)
2. In case of the Pinch Roller Block and the Pinch Roller Cam installation, install correctly as **Fig. 2-10-B** .

Fig. 2-10-B



9.2.11. A/C HEAD (Refer to [Fig. 2-11-A](#))

1. Remove the screw ①.
2. Remove the A/C Head Base.
3. Remove the 3 screws ②.
4. Remove the A/C Head and A/C Head Spring.

NOTE

1. Do not touch the A/C Head. (Use gloves.)
2. When you install the A/C Head Spring, install as shown in [Fig. 2-11-B](#) .
3. When you install the A/C Head, tighten the screw (1) first, then tighten the screw (2), finally tighten the screw (3).

Fig. 2-11-A

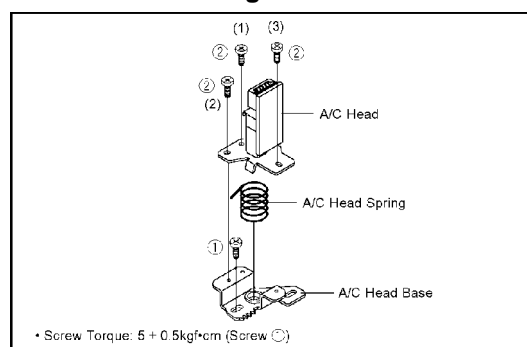
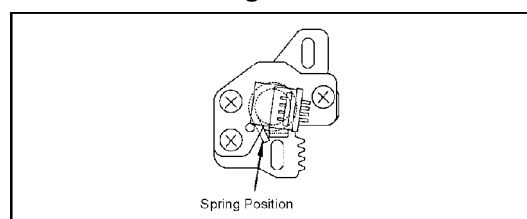


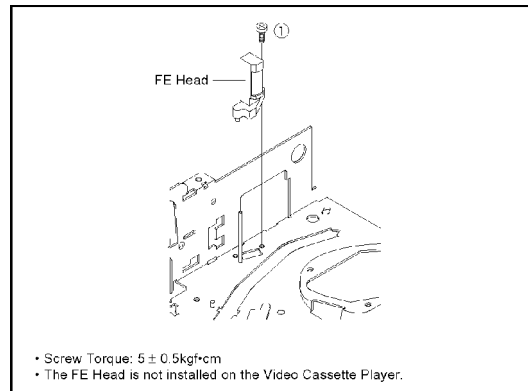
Fig. 2-11-B



9.2.12. FE HEAD (RECORDER ONLY) (Refer to [Fig. 2-12](#))

1. Remove the screw ①.
2. Remove the FE Head.

Fig. 2-12



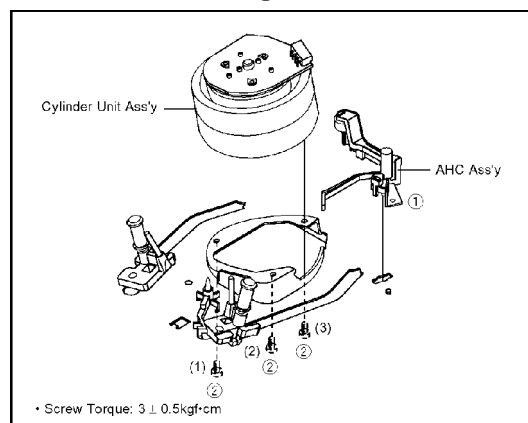
9.2.13. AHC ASS'Y/CYLINDER UNIT ASS'Y (Refer to [Fig. 2-13](#))

1. Unlock the support ① and remove the AHC Ass'y.
2. Disconnect the following connector: (CD2001)
3. Remove the 3 screws ②.
4. Remove the Cylinder Unit Ass'y.

NOTE

1. When you install the Cylinder Unit Ass'y, tighten the screws from (1) to (3) in order while pulling the Ass'y toward the left front direction.

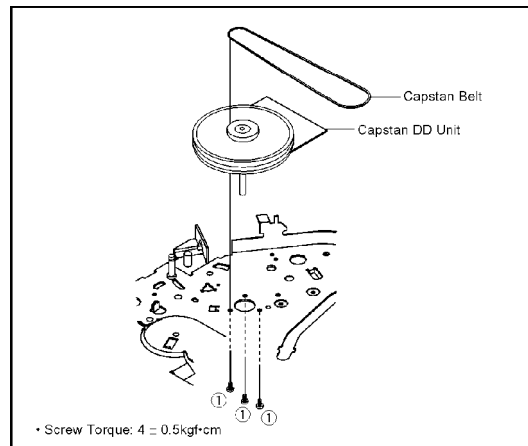
Fig. 2-13



9.2.14. CAPSTAN DD UNIT (Refer to [Fig. 2-14-A](#))

1. Remove the Capstan Belt.
2. Remove the 3 screws ①.
3. Remove the Capstan DD Unit.

Fig. 2-14-A



NOTE

1. In case of the Capstan DD Unit installation, apply the silicon bond (TSE3843-W) on the position **Fig. 2-14-B** correctly. (If no silicon bond applied, abnormal noise will be heard on the deck operation.) (Refer to **Fig. 2-14-B**, C)

Fig. 2-14-B

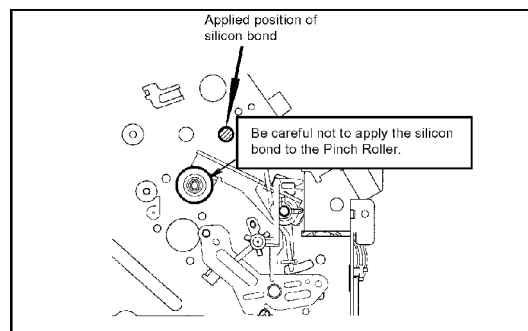
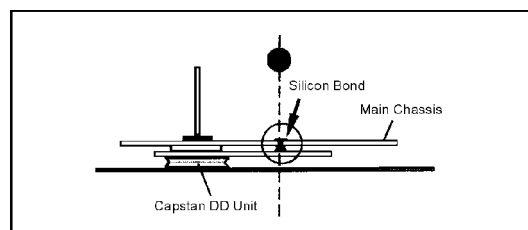


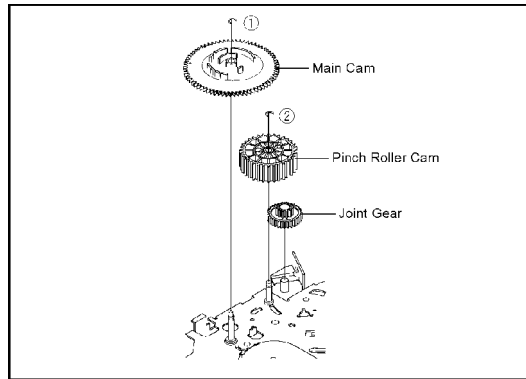
Fig. 2-14-C



9.2.15. MAIN CAM/PINCH ROLLER CAM/JOINT GEAR (Refer to **Fig. 2-15-A)**

1. Remove the E-Ring ① , then remove the Main Cam.
2. Remove the E-Ring ② , then remove the Pinch Roller Cam and Joint Gear.

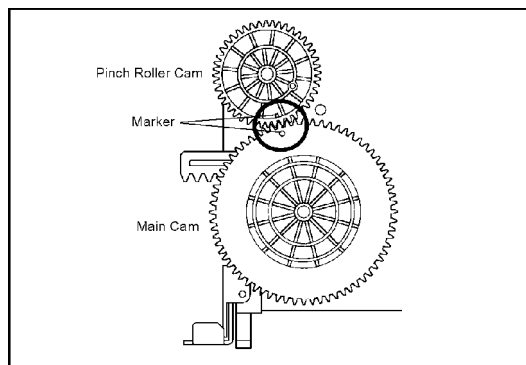
Fig. 2-15-A



NOTE

1. In case of the Pinch Roller Cam and Main Cam installation, install them as the circled section of **Fig. 2-15-B** so that the each markers are met. (Refer to **Fig.2-15-B**)

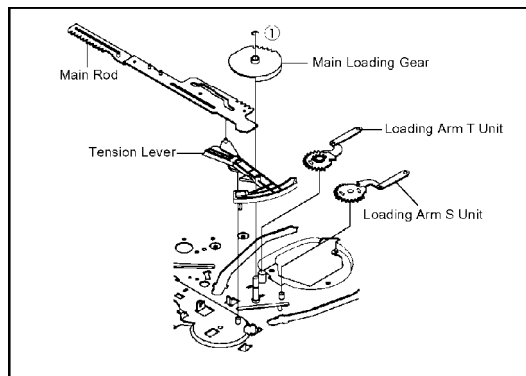
Fig. 2-15-B



9.2.16. LOADING GEAR S/T UNIT (Refer to **Fig. 2-16-A)**

1. Remove the E-Ring ① and remove the Main Loading Gear.
2. Remove the Main Rod, Tension Lever, Loading Arm S Unit and Loading Arm T Unit.

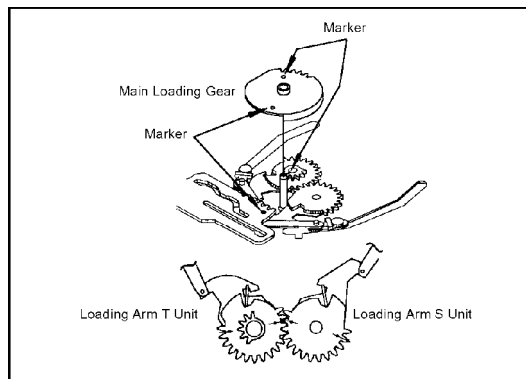
Fig. 2-16-A



NOTE

1. When you install the Loading Arm S Unit, Loading Arm T Unit and Main Loading Gear, align each marker. (Refer to **Fig. 2-16-B**)

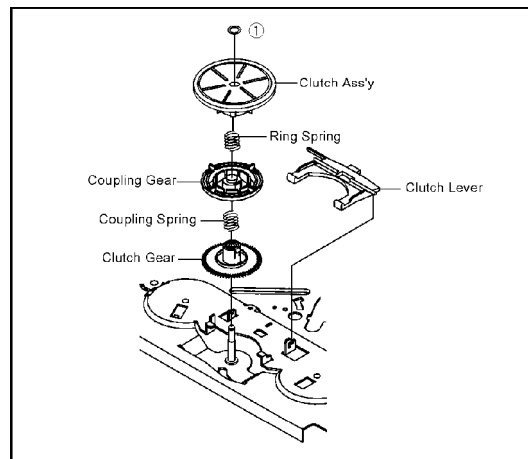
Fig. 2-16-B



9.2.17. CLUTCH ASS'Y/RING SPRING/CLUTCH LEVER/ CLUTCH GEAR (Refer to **Fig. 2-17-A)**

1. Remove the Polyslider Washer ①.
2. Remove the Clutch Ass'y and Ring Spring.
3. Remove the Clutch Lever.
4. Remove the Coupling Gear, Coupling Spring and Clutch Gear.

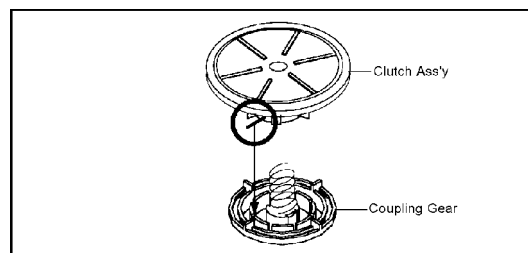
Fig. 2-17-A



NOTE

1. In case of the Clutch Ass'y installation, install it with inserting the spring of the Clutch Ass'y into the dent of the Coupling Gear.
(Refer to **Fig. 2-17-B**)

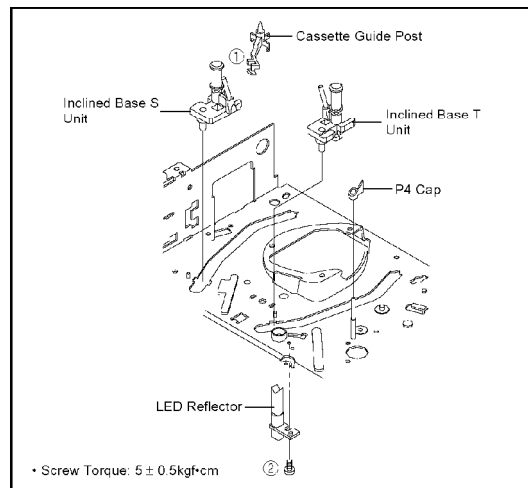
Fig. 2-17-B



9.2.18. CASSETTE GUIDE POST/INCLINED BASE S/T UNIT/P4 CAP/LED REFLECTOR (Refer to **Fig. 2-18-A)**

1. Remove the P4 Cap.
2. Unlock the support ① and remove the Cassette Guide Post.
3. Remove the Inclined Base S/T Unit.
4. Remove the screw ②.
5. Remove the LED Reflector.

Fig. 2-18-A



NOTE

1. Do not touch the roller of Guide Roller.
2. In case of the P4 Cap installation, install it with parallel for "A" and "B" of **Fig. 2-18-B** .
3. In case of the Cassette Guide Post installation, install correctly as the circled section of **Fig. 2-18-C** .

Fig. 2-18-B

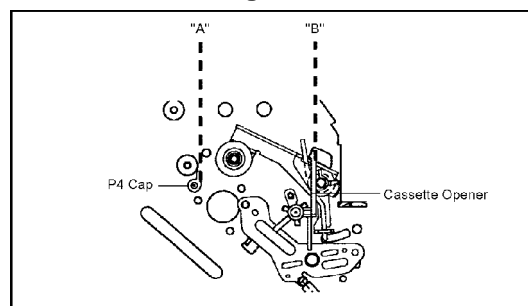
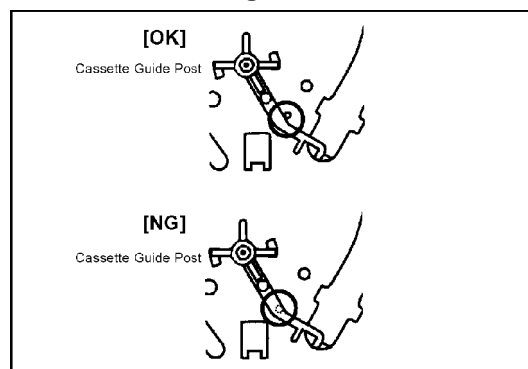


Fig. 2-18-C



9.3. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

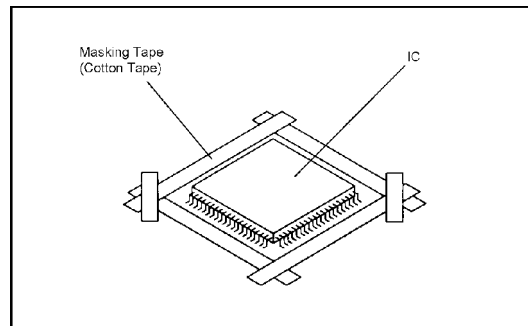
REMOVAL

1. Put the Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. (Refer to [Fig. 3-1](#) .)

NOTE

Masking is carried out on all the parts located within 10 mm distance from IC leads.

Fig. 3-1

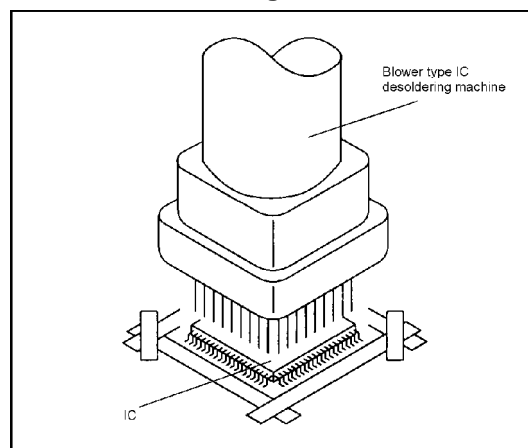


2. Heat the IC leads using a blower type IC desoldering machine. (Refer to [Fig. 3-2](#) .)

NOTE

Do not add the rotating and the back and forth directions force on the IC, until IC can move back and forth easily after desoldering the IC leads completely.

Fig. 3-2

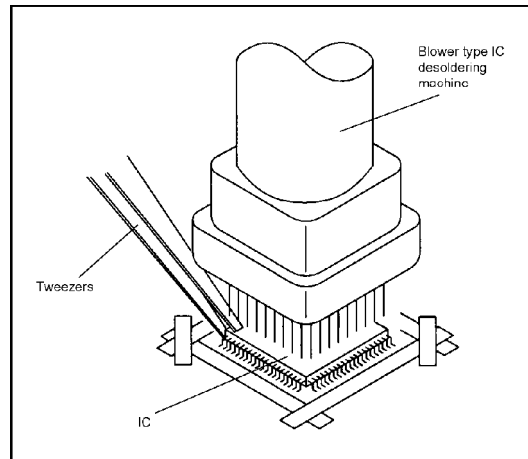


3. When IC starts moving back and forth easily after desoldering completely, pickup the corner of the IC using a tweezers and remove the IC by moving with the IC desoldering machine. (Refer to [Fig. 3-3](#) .)

NOTE

Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.

Fig. 3-3



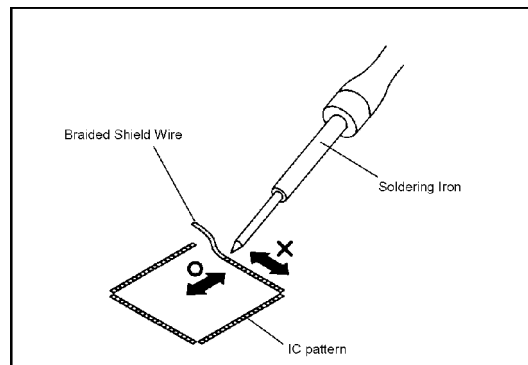
4. Peel off the Masking Tape. 4.

5. Absorb the solder left on the pattern using the Braided Shield Wire. (Refer to [Fig. 3-4](#) .)

NOTE

Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.

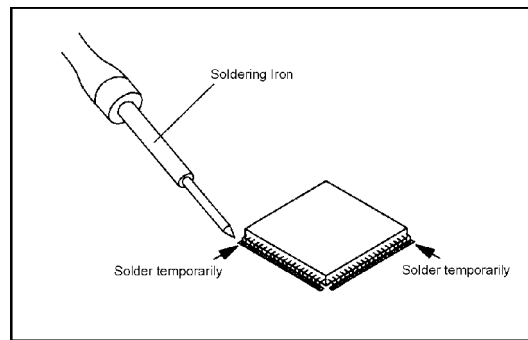
Fig. 3-4



INSTALLATION

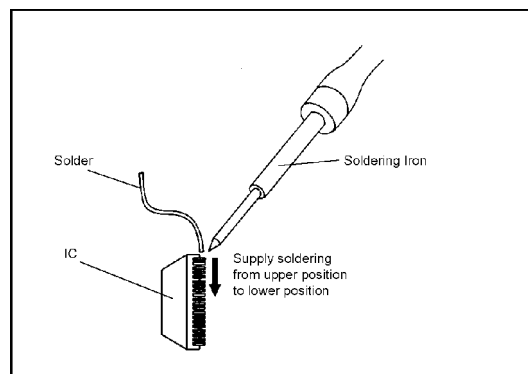
1. Take care of the polarity of new IC and then install the new IC fitting on the printed circuit pattern. Then solder each lead on the diagonal positions of IC temporarily. (Refer to [Fig. 3-5](#) .)

Fig. 3-5



2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. (Refer to **Fig. 3-6** .)

Fig. 3-6

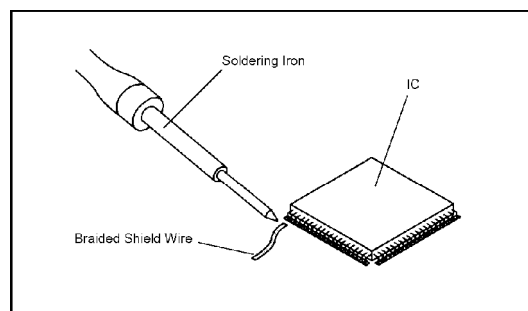


3. Absorb the solder left on the lead using the Braided Shield Wire. (Refer to **Fig. 3-7** .)

NOTE

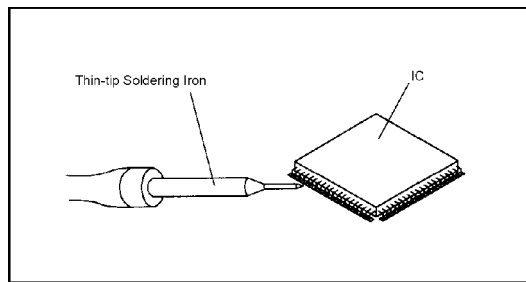
Do not absorb the solder to excess.

Fig. 3-7



4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. (Refer to **Fig. 3-8** .)

Fig. 3-8



5. Finally, confirm the soldering status on four sides of the IC using a magnifying glass.

Confirm that no abnormality is found on the soldering position and installation position of the parts around the IC. If some abnormality is found, correct by resoldering.

NOTE

When the IC leads are bent during soldering and/or repairing, do not repair the bending of leads. If the bending of leads are repaired, the pattern may be damaged. So, be always sure to replace the IC in this case.

10. KEY TO ABBREVIATIONS

11. SERVICE MODE LIST

This unit provided with the following SERVICE MODES so you can repair, examine and adjust easily.

To enter to the SERVICE MODE function, press and hold both buttons simultaneously on the main unit and on the remote control for more than a standard time (second).

Set Key	Set Key	Standard Time (seconds)	Operations
CH UP	FF	2	PLAY/REC total hours are displayed on the TV Monitor. Refer to the "PREVENTIVE CHECKS AND SERVICE INTERVALS" (CONFIRMATION OF HOURS USED). Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
CH UP	STOP	2	Adjust the PG SHIFTER automatically. Refer to the "ELECTRICAL ADJUSTMENT" (PG SHIFTER).
CH UP	PLAY	2	Initialization of the factory on VCR. NOTE: Do not use this for the normal servicing. If you set a factory initialization, the memories are reset such as the clock setting, the channel setting, and PLAY/REC total hours.
CH DOWN	POWER	2	VCR operation mode at no connection of DVD. Refer to the "PREPARATION FOR SERVICING" NOTE: Although the DVD is connected, the DVD mode cannot be selected.

Set Key	Remocon Key	Standard Time (seconds)	Operations
REC	4	2	Initialization of the factory on DVD. NOTE: Do not use this for the normal servicing. The function will only work without the setting of DVD disc at DVD mode. While pressing the Remocon Key for more than the Standard Time, press the Set Key simultaneously.
STOP	7	3	Releasing of PARENTAL LOCK. Refer to the "PARENTAL CONTROL - RATING LEVEL". NOTE: The function will only work without the setting of DVD disc at DVD mode.

Method	Operations
Press the ATR button on the remote control for more than 2 seconds during PLAY.	Adjusting of the Tracking to the center position. Refer to the "MECHANICAL ADJUSTMENT" (GUIDE ROLLER) and "ELECTRICAL ADJUSTMENT" (PG SHIFTER).
Make the short circuit between the test point of SERVICE and the GND.	The BOT, EOT, and the Reel Sensor do not work and the VCR deck can be operated without a cassette tape. Refer to the "PREPARATION FOR SERVICING"

12. PREVENTIVE CHECKS AND SERVICE INTERVALS

The following standard table depends on environmental conditions and usage.

Parts replacing time does not mean the life span for individual parts.

Also, long term storage or misuse may cause transformation and aging of rubber parts.

The following list means standard hours, so the checking hours depends on the conditions.

Parts Name	Time	500 hours	1,000 hours	1,500 hours	2,000 hours	2,500 hours	Notes
Audio Control Head		■	■	■	●	●	Clean those parts in contact with the tape.
Full Erase Head (Recorder only)		■	■	■	●	●	
Capstan Belt			●	●	●	●	
Pinch Roller		■	●	●	●	●	Clean the rubber, and parts which the rubber touches.
Capstan DD Unit			●	●	●	●	
Loading Motor						●	
Tension Band			●	●	●	●	
T Brake Band			●	●	●	●	
Clutch Ass'y			●	●	●	●	
Idler Arm Ass'y			●	●	●	●	
Capstan Shaft		■	■	■	■	■	
Tape Running Guide Post		■	■	■	■	■	Replace when rolling becomes abnormal.
Cylinder Unit		■	●	●	●	●	Clean the Head

■ : Clean
● : Check it and if necessary, replace it.

CONFIRMATION OF HOURS USED

PLAY/REC total hours can be checked on the screen.

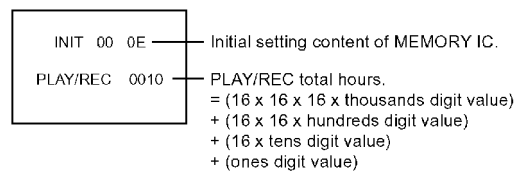
Total hours are displayed in 16 system of notation.

NOTE:

If you set a factory initialization, the total hours is reset to "0".

1. Connect the set to TV Monitor.
2. Turn on the POWER.
3. Press both CH UP button on the set and the FF button on the set for more than 2 seconds.
The **Fig. 1** screen will appear on TV Monitor.
4. After the confirmation of using hours, turn off the power.

Fig. 1



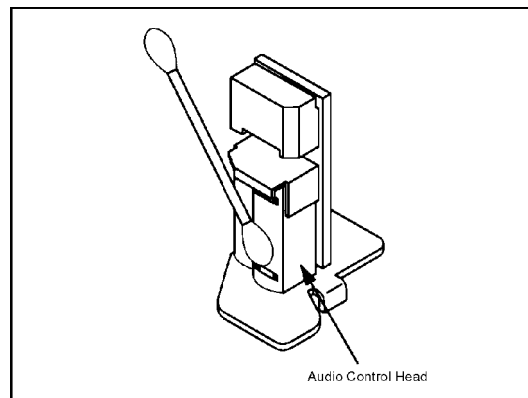
CLEANING

NOTE

After cleaning the heads with isopropyl alcohol, do not run a tape until the heads dry completely. If the heads are not completely dry and alcohol gets on the tape, damage may occur.

1. AUDIO CONTROL HEAD

Clean the Audio Control Head with the cotton stick soaked by alcohol. Clean the full erase head in the same manner. (Refer to the figure below.)



2. TAPE RUNNING SYSTEM

When cleaning the tape transport system, use the gauze moistened with isopropyl alcohol.

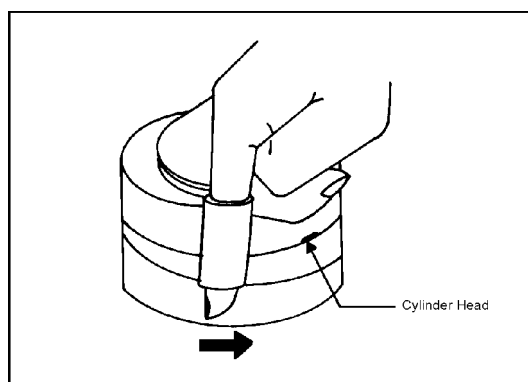
3. CYLINDER

Wrap a piece of chamois around your finger. Dip it in isopropyl alcohol. Hold it to the cylinder head softly.

Turn the cylinder head counterclockwise to clean it (in the direction of the arrow). (Refer to the figure below.)

NOTE

Do not exert force against the cylinder head. Do not move the chamois upward or downward on the head. Use the chamois one by one.



13. WHEN REPLACING EEPROM (MEMORY) IC

If a service repair is undertaken where it has been required to change the MEMORY IC, the following steps should be taken to ensure correct data settings while making reference to [Table 1](#).

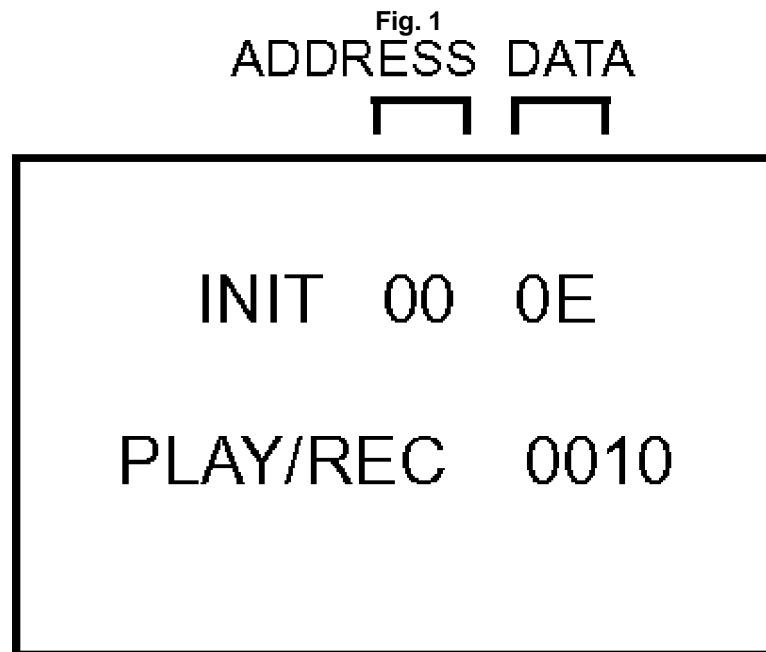
NOTE:

INI 34 and INI 35 cannot be set. Because, the total time for the PLAY/REC of the main unit is recorded.

Table 1

INIT	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
00	0E	72	BE	60	64	64	4A	86	0B	2B	86	32	0A	08	0A	0F
10	AF	97	95	8A	00	00	31	04	88	A5	9F	3A	00	10	BF	00
20	3A	11	22	70	61	2A	3A	00	0B	00	07	85	A2	B0	00	---

1. Connect the set to TV Monitor.
2. Turn on the POWER.
3. Press both CH UP button on the set and the FF button on the set for more than 2 seconds.
ADDRESS and DATA will appear on TV Monitor as **Fig. 1** .



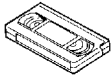
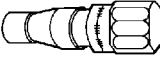
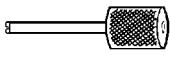
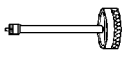
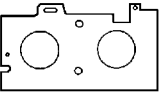
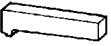
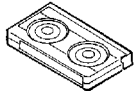


4. ADDRESS is now selected and should "blink". Using the SET + or - button on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
5. Press ENTER to select DATA. When DATA is selected, it will "blink".
6. Again, step through the DATA using SET + or - button until required DATA value has been selected.
7. Pressing ENTER will take you back to ADDRESS for further selection if necessary.
8. Repeat steps 4 to 7 until all data has been checked.
9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.
After the data input, set to the initializing of shipping.
10. Turn POWER on.

11. Press both CH UP button on the set and the PLAY button on the set for more than 2 seconds.

12. After the finishing of the initializing of shipping, the unit will turn off automatically.

The unit will now have the correct DATA for the new MEMORY IC.

14. SERVICING FIXTURES AND TOOLS

VHS Alignment Tape JG001B (VN1S-LI6 ³) JG001P (VN1S-LI6 ³ H) JG001S (VN1S-X6 ³) 	JG002B Adapter JG002E Dial Torque Gauge (10~90gf•cm) JG002F (60~600gf•cm) 	JG005 Post Adjustment Screwdriver Part No. SV-TG0-030-000 (small) 	JG153 X Value Adjustment Screwdriver 
JG022 Master Plane 	JG024A Reel Disk Height Adjustment Jig 	JG100A Torque Tape (VHT-063) 	JG154 Cable 
Tentelometer 			

Ref. No.	Part No.	Parts Name	Remarks
JG001B	APJG001B00	VHS Alignment Tape	Monoscope, 6KHz
JG001P	APJG001P00	VHS Alignment Tape	Hi-Fi Audio
JG001S	APJG001S00	VHS Alignment Tape	X Value Adjustment
JG002B	APJG002B00	Adapter	VSR Torque, Brake Torque (S Reel/T Reel Ass'y)
JG002E	APJG002E00	Dial Torque Gauge (10~90gf•cm)	Brake Torque (T Reel Ass'y)
JG002F	APJG002F00	Dial Torque Gauge (60~600gf•cm)	VSR Torque, Brake Torque (S Reel)
JG005	APJG005000	Post Adjustment Screwdriver	Guide Roller Adjustment
JG153	APJG153000	X Value Adjustment Screwdriver	X Value Adjustment
JG022	APJG022000	Master Plane	Reel Disk Height Adjustment
JG024A	APJG024A00	Reel Disk Height Adjustment Jig	Reel Disk Height Adjustment
JG100A	APJG100A00	Torque Tape (VHT-063)	Playback Torque, Back Tension Torque During Playback
JG154	APJG154000	Cable	Used to connect the test point of SERVICE and GROUND

15. PREPARATION FOR SERVICING

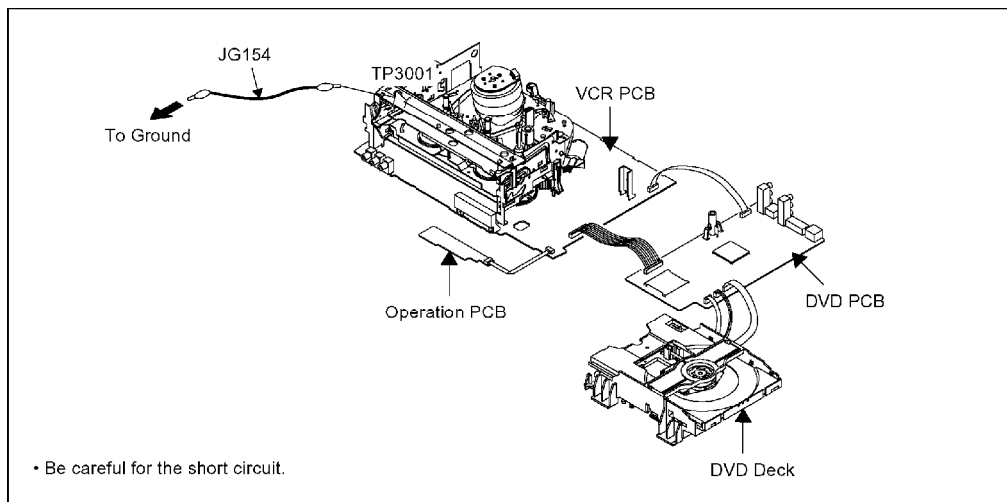
- It's possible to get the Servicing Position without the extension cable when you arrange the unit as shown below.

How to use the Servicing Fixture

1. While pressing the POWER button on the set for more than 2 seconds, press the CH DOWN button on the set simultaneously at the Power OFF. Although the DVD is connected, the DVD mode

- cannot be selected.
2. Short circuit between TP3001 and Ground with the cable JG154.
(The BOT, EOT, and the Reel Sensor do not work and the VCR deck can be operated without a cassette tape.)
 3. In case of using a cassette tape, press the TAPE EJECT button to insert or eject a cassette tape.
Turn on the power and re-check the cable before checking the trouble points.

When you servicing with connection of DVD, perform the operations above step 2 to step 3.



16. MECHANICAL ADJUSTMENTS

16.1. CONFIRMATION AND ADJUSTMENT

Read the following NOTES before starting work.

- Place an object which weighs between 450g~500g on the Cassette Tape to keep it steady when you want to make the tape run without the Cassette Holder. (Do not place an object which weighs over 500g.)

16.1.1. CONFIRMATION AND ADJUSTMENT OF REEL DISK HEIGHT

1. Turn on the power and set to the STOP mode.
2. Set the master plane (JG022) and reel disk height adjustment jig (JG024A) on the mechanism framework, taking care not to scratch the drum, as shown in [Fig. 1-1-A](#).
3. While turning the reel and confirm the following points.
Check if the surface "A" of reel disk is lower than the surface "B"

of reel disk height adjustment jig (JG024A) and is higher than the surface "C". If it is not passed, place the height adjustment washers and adjust to 10 (+2,-0) mm.

4. Adjust the other reel in the same way.

Fig. 1-1-A

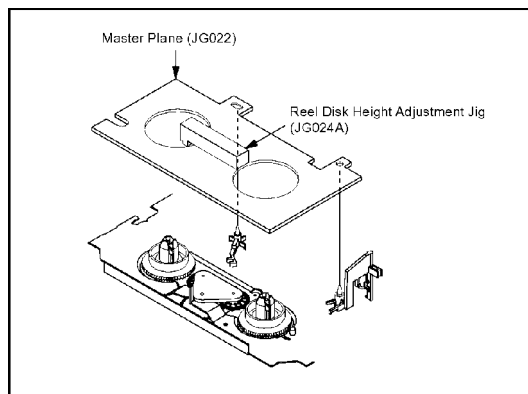
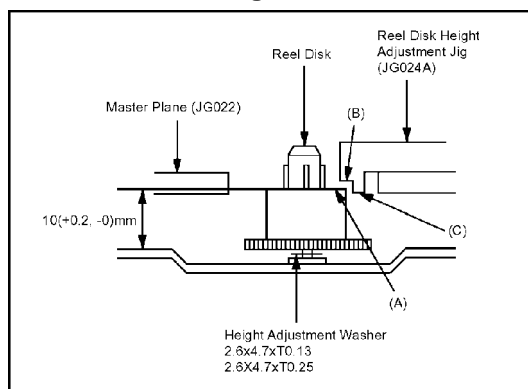


Fig. 1-1-B



16.1.2. CONFIRMATION AND ADJUSTMENT OF TENSION POST POSITION

1. Set to the PLAY mode.
2. Adjust the adjusting section for the Tension Arm position so that the Tension Arm top is within the standard line of Main Chassis.
3. While turning the S Reel clockwise, confirm that the edge of the Tension Arm is located in the position described above.

Fig. 1-2-A

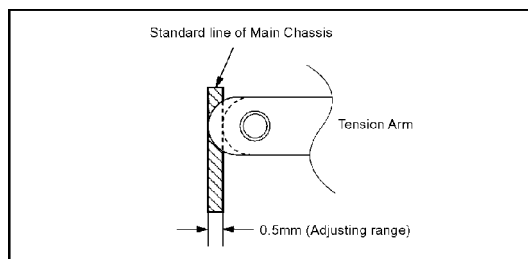
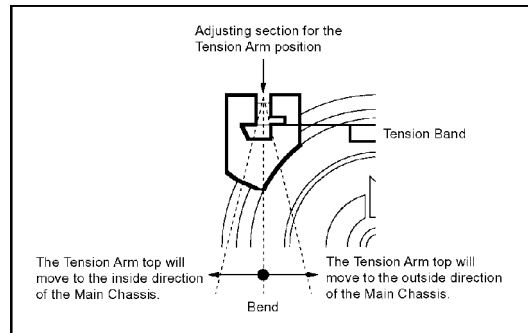


Fig. 1-2-B



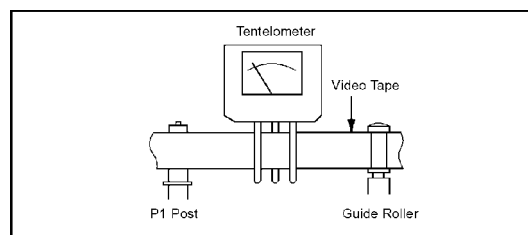
16.1.3. CONFIRMATION OF PLAYBACK TORQUE AND BACK TENSION TORQUE DURING PLAYBACK

1. Load a video tape (T-120) recorded in standard speed mode. Set the unit to the PLAY mode.
2. Install the tentelometer as shown in **Fig. 1-3** . Confirm that the meter indicates $20 \pm 2\text{gf}$ in the beginning of playback.

- USING A CASSETTE TYPE TORQUE TAPE (JG100A)

1. After confirmation and adjustment of Tension Post position (Refer to item 1-2) , load the cassette type torque tape (JG100A) and set to the PLAY mode.
2. Confirm that the right meter of the torque tape indicates 50~90gf·cm during playback in SP mode.
3. Confirm that the left meter of the torque tape indicates 25~40gf·cm during playback in SP mode.

Fig. 1-3



16.1.4. CONFIRMATION OF VSR TORQUE

1. Install the Torque Gauge (JG002F) and Adapter (JG002B) on the S Reel. Set to the Picture Search (Rewind) mode. (Refer to **Fig. 1-4-B**)
2. Then, confirm that it indicates 120~180gf·cm.

NOTE

Install the Torque Gauge on the reel disk firmly. Press the REW button to turn the reel disk.

16.1.5. CONFIRMATION OF REEL BRAKE TORQUE

(S Reel Brake) (Refer to [Fig. 1-4-B](#))

1. Once set to the Fast Forward mode then set to the Stop mode.
While, unplug the AC cord when the Pinch Roller Block is on the position of [Fig. 1-4-A](#) .
2. Move the Idler Ass'y from the S Reel.
3. Install the Torque Gauge (JG002F) and Adapter (JG002B) on the S Reel. Turn the Torque Gauge (JG002F) clockwise.
4. Then, confirm that it indicates 60~100gf·cm.

(T Reel Brake) (Refer to [Fig. 1-4-B](#))

1. Once set to the Fast Forward mode then set to the Stop mode.
While, unplug the AC cord when the Pinch Roller Block is on the position of [Fig. 1-4-A](#) .
2. Move the Idler Ass'y from the T Reel.
3. Install the Torque Gauge (JG002E) and Adapter (JG002B) on the T reel. Turn the Torque Gauge (JG002E) counterclockwise.
4. Then, confirm that it indicates 30~50gf·cm.

Fig. 1-4-A

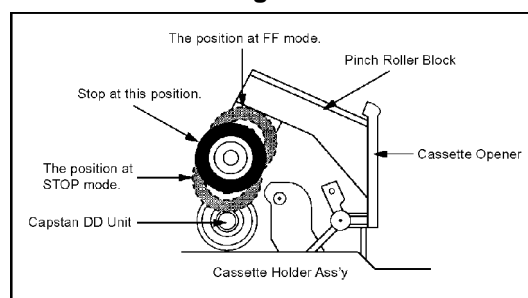
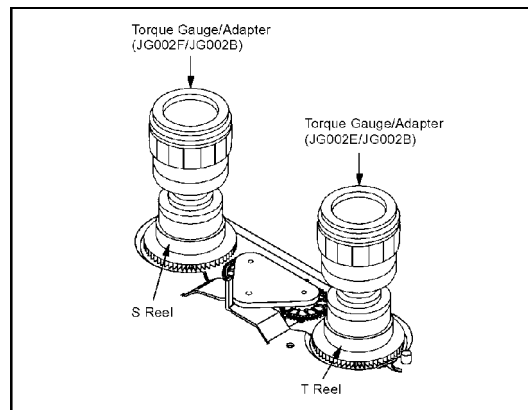


Fig. 1-4-B



NOTE

If the torque is out of the range, replace the following parts.

Check item	Replacement Part
1-4	Idler Ass'y/Clutch Ass'y
1-5	S Reel side: S Reel/Tension Band/Tension Connect/Tension Arm Ass'y T Reel side: T Reel/T Brake Band/T Brake Spring/T Brake Arm

16.2. CONFIRMATION AND ADJUSTMENT OF TAPE RUNNING MECHANISM

Tape Running Mechanism is adjusted precisely at the factory. Adjustment is not necessary as usual. When you replace the parts of the tape running mechanism because of long term usage or failure, the confirmation and adjustment are necessary.

16.2.1. GUIDE ROLLER

1. Playback the VHS Alignment Tape (JG001) .
(Refer to **SERVICING FIXTURE AND TOOLS**)
2. Connect CH-1 of the oscilloscope to TP101 (Envelope) and CH-2 to TP3002 (SW Pulse) .
3. Press and hold the ATR button on the remote control more than 2 seconds to set tracking to center.
4. Trigger with SW Pulse and observe the envelope. (Refer to **Fig. 2-1-A**)
5. When observing the envelope, adjust the Adjusting Driver (JG005) slightly until the envelope will be flat.
Even if you press the Tracking Button, adjust so that flatness is not moved so much.
6. Adjust so that the A : B ratio is better than 3 : 2 as shown in **Fig. 2-1-B** , even if you press the Tracking Button to move the envelope

(The envelope waveform will begin to decrease when you press the Tracking Button).

7. Adjust the PG shifter during playback.
(Refer to the ELECTRICAL ADJUSTMENTS)

NOTE

After adjustment, confirm and adjust A/C head.
(Refer to item 2-2)

Fig. 2-1-A

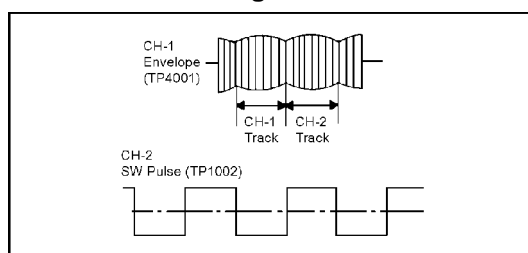
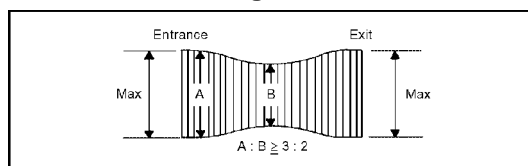


Fig. 2-1-B



16.2.2. CONFIRMATION AND ADJUSTMENT OF AUDIO/CONTROL HEAD

When the Tape Running Mechanism does not work well, adjust the following items.

1. Playback the VHS Alignment Tape (JG001B) .
(Refer to SERVICING FIXTURE AND TOOLS)
2. Confirm that the reflected picture of stamp mark is appeared on the tape prior to P4 Post as shown in **Fig. 2-2-A** .
 - A. When the reflected picture is distorted, turn the screw ① clockwise until the distortion is disappeared.
 - B. When the reflected picture is not distorted, turn the screw ① counterclockwise until little distortion is appeared, then adjust the a).
3. Turn the screw ② to set the audio level to maximum.
4. Confirm that the bottom of the Audio/ Control Head and the bottom of the tape is shown in **Fig. 2-2-C** .
 - A. When the height is not correct, turn the screw ③ to adjust the height. Then, adjust the 1~3 again.

Fig. 2-2-A

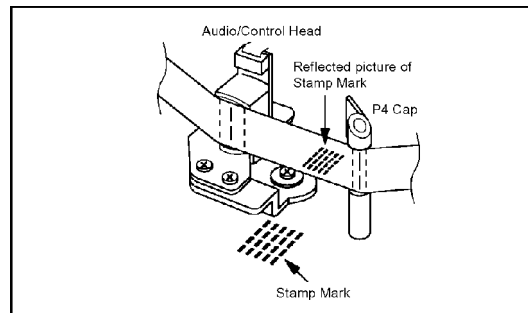


Fig. 2-2-B

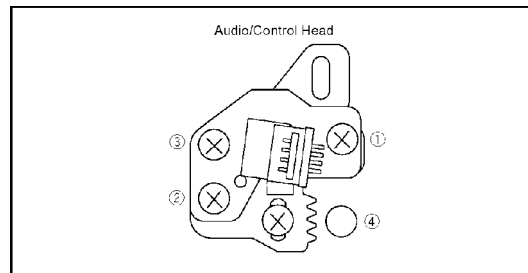
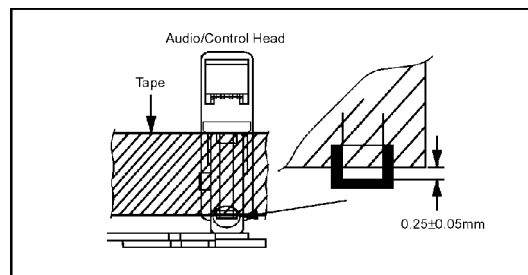


Fig. 2-2-C



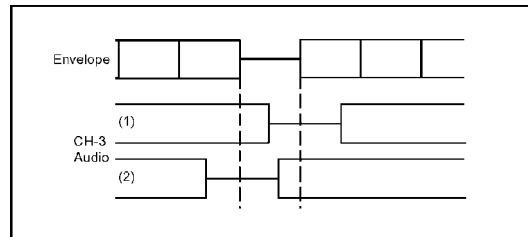
16.2.3. TAPE RUNNING ADJUSTMENT (X VALUE ADJUSTMENT)

- 1. Confirm and adjust the height of the Reel Disk.
(Refer to item 1-1)**
- 2. Confirm and adjust the position of the Tension Post.
(Refer to item 1-2)**
- 3. Adjust the Guide Roller. (Refer to item 2-1)**
- 4. Confirm and adjust the Audio/Control Head.
(Refer to item 2-2)**
- 5. Connect CH-1 of the oscilloscope to TP3002 , CH-2 to TP101 and CH-3 to HOT side of Audio Out Jack .**
- 6. Playback the VHS Alignment Tape (JG001S) .
(Refer to SERVICING FIXTURE AND TOOLS)**
- 7. Press and hold the ATR button on the remote control more than 2**

seconds to set tracking to center.

8. Set the X Value adjustment driver (JG153) to the ④ of **Fig. 2-2-B** . Adjust X value so that the envelope waveform output becomes maximum. Check if the relation between Audio and Envelope waveform becomes (1) or (2) of **Fig. 2-3** .

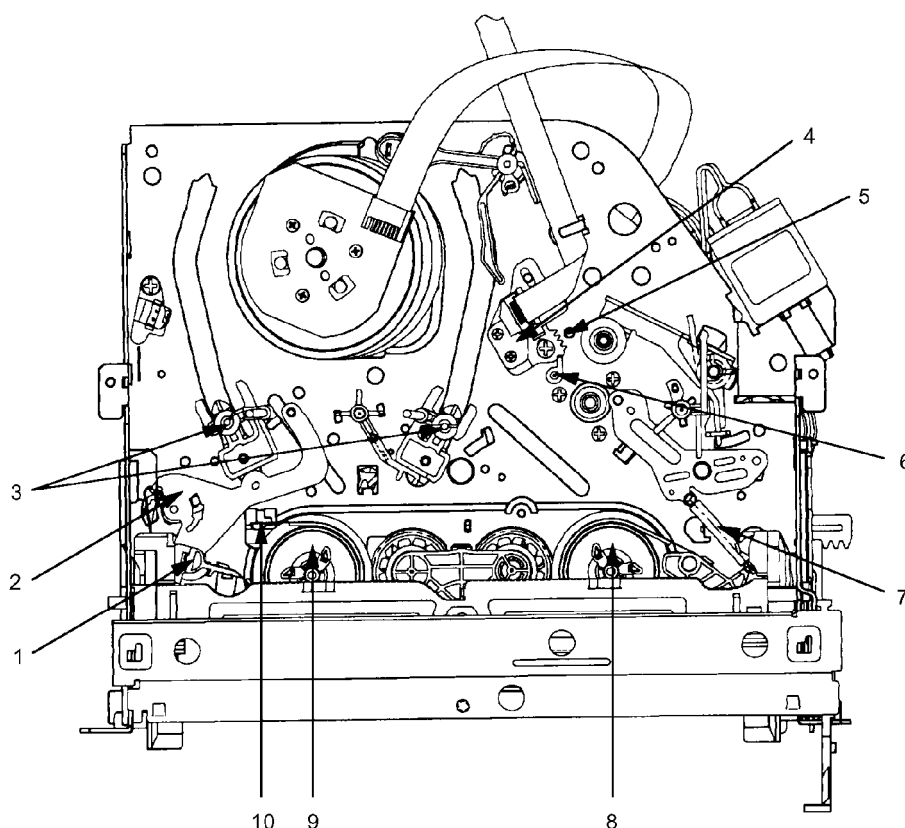
Fig. 2-3



16.2.4. CONFIRM HI-FI AUDIO (Hi-Fi model only)

1. Connect CH-1 of the oscilloscope to TP101 and CH-2 to the Hi-Fi Audio Out Jack .
2. Playback the VHS Alignment Tape (JG001P) .
(Refer to SERVICING FIXTURE AND TOOLS)
3. Press and hold the ATR button on the remote control more than 2 seconds to set tracking to center.
4. Press the Tracking Up button and count number of steps which the audio output is changed from Hi-Fi (10KHz) to MONO (6KHz).
5. Press and hold the Tracking-Auto button on the remote control more than 2 seconds to set tracking to center.
6. Press the Tracking Down button and count number of steps which the audio output is changed from Hi-Fi (10KHz) to MONO (6KHz).
7. If the difference are more than 3 steps, set the X Value adjustment driver (JG153) to ④ of **Fig. 2-2-B** . Change the X Value and adjust it so that the value becomes within 2 steps.

16.3. MECHANISM ADJUSTMENT PARTS LOCATION GUIDE



- | | |
|-----------------------------------|--|
| 1. Tension Connect | 6. P4 Post |
| 2. Tension Arm | 7. T Brake Spring |
| 3. Guide Roller | 8. T Reel |
| 4. Audio/Control Head | 9. S Reel |
| 5. X value adjustment driver hole | 10. Adjusting section for the Tension Arm position |

17. ELECTRICAL ADJUSTMENTS

Read and perform this adjustment when repairing the circuits or replacing electrical parts or PCB assemblies.

17.1. BASIC ADJUSTMENT

CAUTION

- When you exchange IC and Transistor for a heat sink, apply the silicon grease (YG6260M) on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damage to the IC and Transistor.)

17.1.1. PG SHIFTER

CONDITIONS

MODE-PLAYBACK

Input Signal-Alignment Tape (JG001B)

INSTRUCTIONS

1. Connect CH-1 on the oscilloscope to TP3002 and CH-2 to TP8001 .
2. Playback the alignment tape. (JG001B)
3. Press and hold the Tracking-Auto button on the remote control more than 2 seconds to set tracking to center.
4. Press both CH UP button on the set and the STOP button on the set for more than 2 seconds.

Fig. 1-1-A

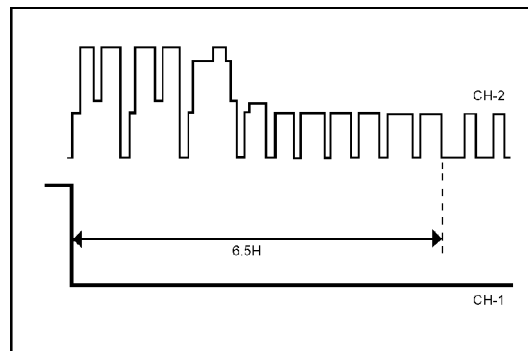
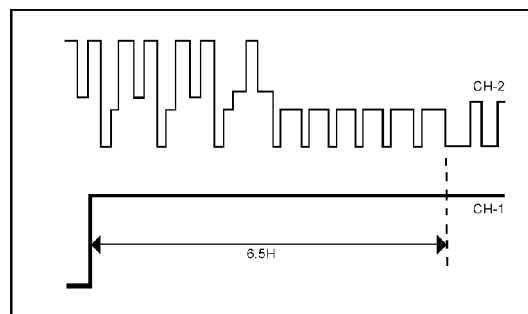
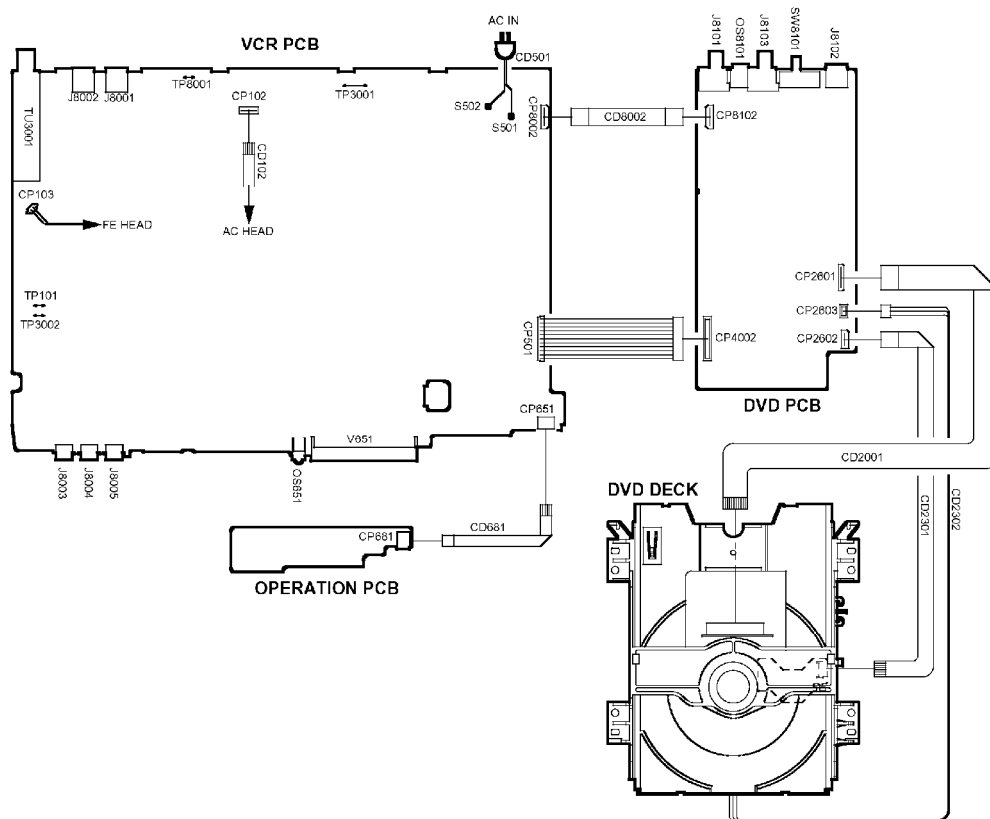


Fig. 1-1-B



17.2. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



18. BLOCK DIAGRAMS

18.1. DVD BLOCK DIAGRAM

18.2. Y/C/AUDIO/CCD/HEAD AMP BLOCK DIAGRAM

18.3. SYSCON BLOCK DIAGRAM

18.4. OPERATION/DISPLAY BLOCK DIAGRAM

18.5. HiFi/DEMODULATOR BLOCK DIAGRAM

18.6. TUNER/JACK BLOCK DIAGRAM

18.7. POWER BLOCK DIAGRAM

19. PRINTED CIRCUIT BOARDS

19.1. DVD PRINTED CIRCUIT BOARD

19.2. VCR/OPERATION (INSERTED PARTS) PRINTED CIRCUIT BOARD

19.3. VCR (CHIP MOUNTED PARTS) PRINTED CIRCUIT BOARD

20. SCHEMATIC DIAGRAMS

20.1. MPEG/MICON SCHEMATIC DIAGRAM

20.2. MEMORY SCHEMATIC DIAGRAM

20.3. RF AMP/DSP SCHEMATIC DIAGRAM

20.4. AUDIO/VIDEO SCHEMATIC DIAGRAM

20.5. Y/C/AUDIO/CCD/HEAD AMP SCHEMATIC DIAGRAM

20.6. SYSCON SCHEMATIC DIAGRAM

20.7. TUNER/JACK SCHEMATIC DIAGRAM

20.8. OPERATION/DISPLAY SCHEMATIC DIAGRAM

20.9. HI-FI/DEMODULATOR SCHEMATIC DIAGRAM

20.10. POWER SCHEMATIC DIAGRAM

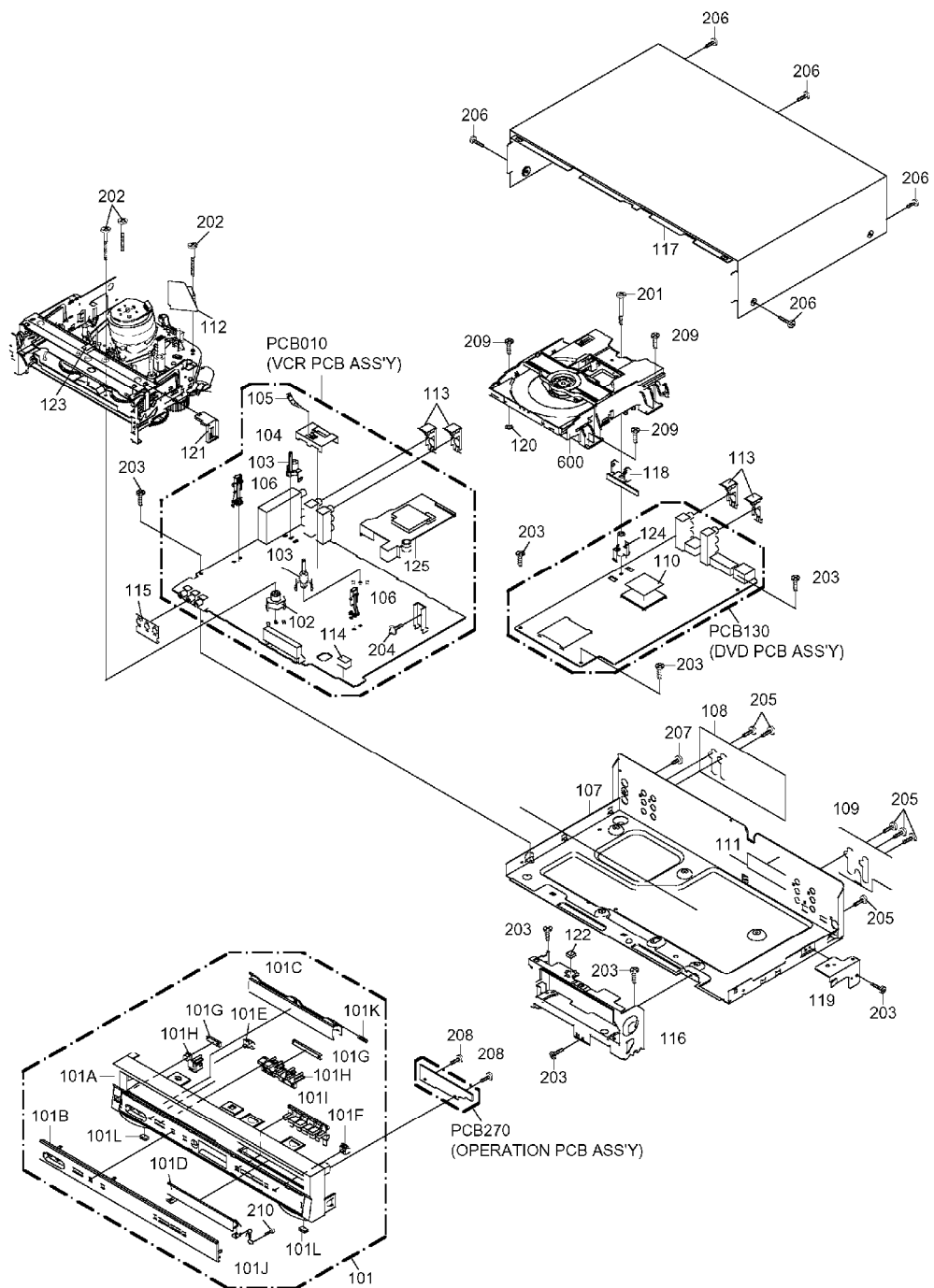
20.11. OPERATION/LED SCHEMATIC DIAGRAM

20.12. INTERCONNECTION DIAGRAM

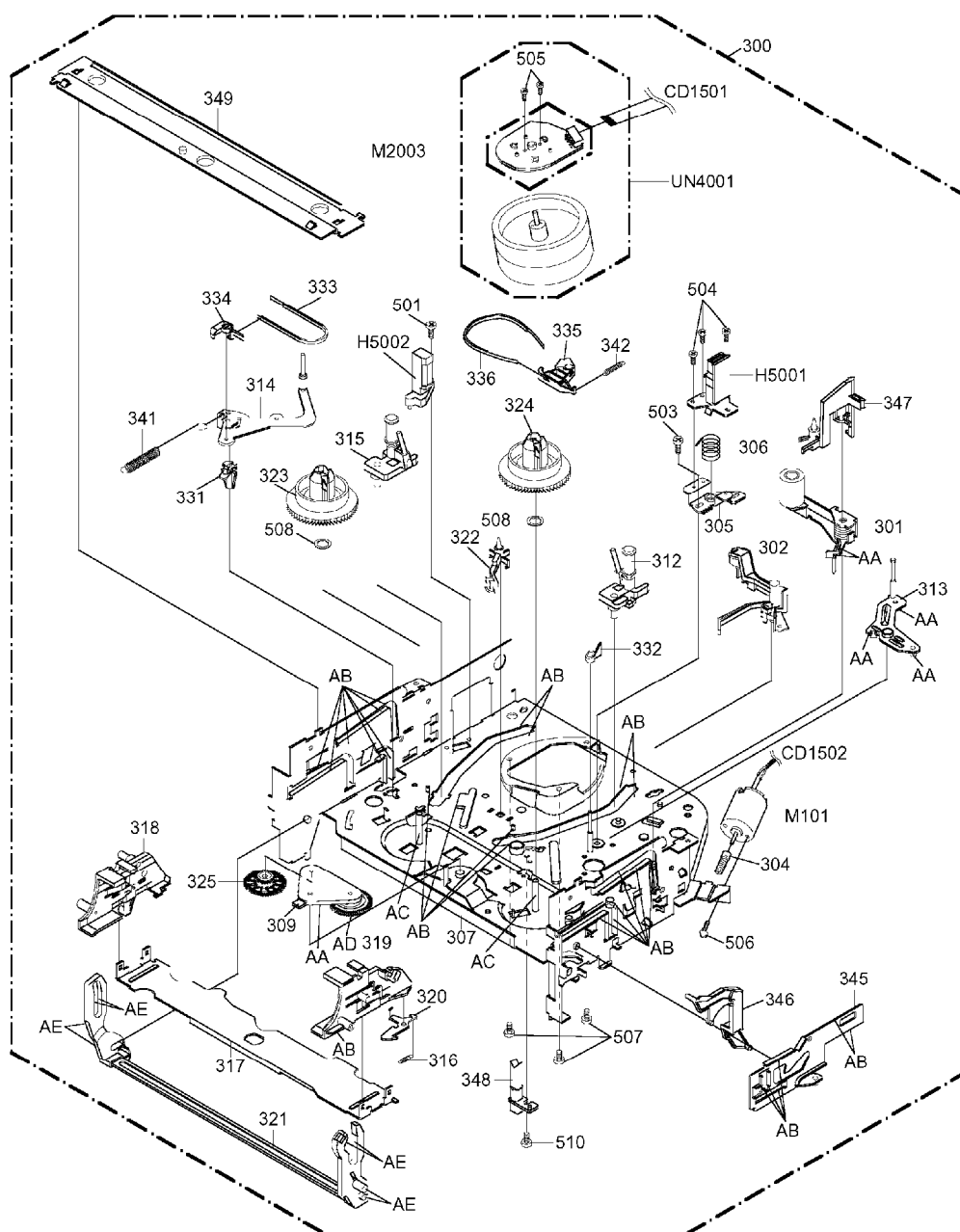
21. WAVEFORMS

22. EXPLODED VIEWS

22.1. MECHANICAL EXPLODED VIEW



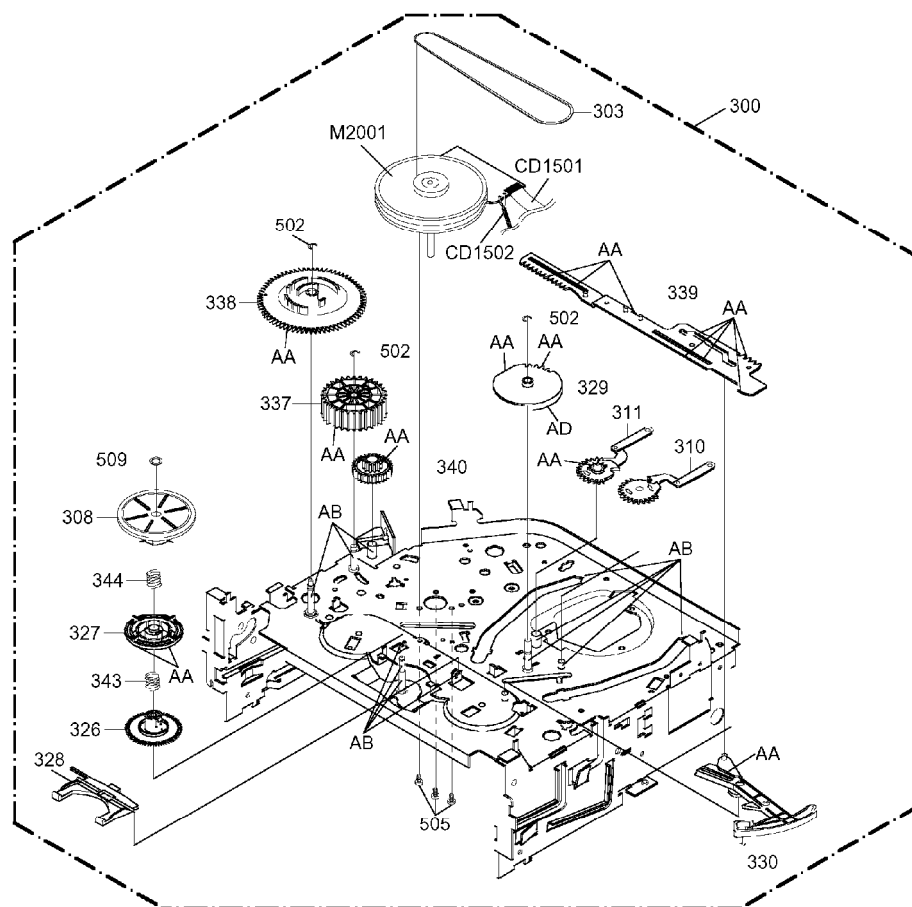
22.2. CHASSIS EXPLODED VIEW (TOP VIEW)



CLASS	PART NO.	PART NAME	MARK
GREASE	Y315061000	G-555G	AA
	Y315071000	MG-33	AB
	Y31D011000	FG-84M	AC
	Y315041000	FL-721	AD
	Y315141000	G-313Y	AE

NOTE: Applying positions AA, AB, AC, AD and AE for the grease are displayed for this section. Check if the correct grease is applied for each position.

22.3. CHASSIS EXPLODED VIEW (BOTTOM VIEW)



CLASS	PART NO.	PART NAME	MARK
GREASE	Y315061000	G-555G	AA
	Y315071000	MG-33	AB
	Y31D011000	FG-84M	AC
	Y315041000	FL-721	AD
	Y315141000	G-313Y	AE

NOTE: Applying positions AA, AB, AC, AD and AE for the grease are displayed for this section. Check if the correct grease is applied for each position.

23. REPLACEMENT PARTS LISTS




23.1. MECHANICAL REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Remarks
101	A2C518H720	CABINET, FRONT ASSY	
101A	701WPC378	CABINET, FRONT	
101B	711WPDA632	PLATE, DISPLAY	
101C	712WPJB904	FLAP	
101D	712WPJB905	FLAP, DVD	
101E	713WPA0301	GLASS, LED-VCR	
101F	713WPA0302	GLASS, LED-DVD	
101G	738WPA0079	BUTTON, HOLDER	
101H	738WPJA003	BUTTON, FRAME-VCR	
101I	738WPJA004	BUTTON, FRAME-DVD	
101J	742WKA0001	SPRING, DVD-FLAP	
101K	743WKA0042	SPRING, FLAP	
101L	800WFA0051	CUSHION, LEG	
102	701WPA0686	HOLDER, DECK	
103	701WPA0751	HOLDER, DECK	
104	752WSA0230	SHIELD, CASE HEAD AMP	
105	753WUAA006	SPRING, EARTH HEAD AMP	
106	85OP700038	HOLDER, END SENSOR	
107	702WSAA079	PLATE, BOTTOM	
108	722576A021	SHEET, RATING (PV-D744S)	
	722576A024	SHEET, RATING (PV-D734S)	
109	723000C395	SHEET, JACK1	
110	7232020748	SHEET, IC	
111	7260000341	SHEET, CAUTION	
112	752WSA0275	COVER, AC HEAD	
113	752WSA0290	SHIELD, COMPO	
114	800WFA0046	CUSHION	
115	752WUAA001	SHIELD, 3PIN .	
116	761WSA0127	ANGLE, FRONT	
117	702WSAA077	CABINET, TOP	
118	752WSA0359	ANGLE, DVD 2	
119	761WSA0130	ANGLE, DVD	
120	800WB00004	FIBER WASHER 7x3.2xT0.5	
121	761WPA0262	HOLDER, DECK TOP	
122	8965TS1010	CUSHION 65TS10-10H L10	
123	8965TS1017	CUSHION 65TS10-10H L17.5	
124	761WPA0292	HOLDER, DVD	
125	755WPA0041	PLATE, COVER POWER	
126	723000C396	SHEET, JACK2	
201	8154730414	SCREW, TAP TITE(B) M3x41R	
202	8109130B94	SCREW, TAP TITE(B) R PAN 3x29	
203	8109230704	SCREW, TAP TITE(B) R BIND 3x7	
204	8109130A04	SCREW, TAP TITE(B) WH7 3x10	
205	8109230804	SCREW, TAP TITE(B) BIND 3x8	
206	8109K30601	SCREW, TAP TITE(B) BIND(3D) 3x6	
207	8107130404	SCREW, TAP TITE(S) PAN 3x4	
208	8110226804	SCREW, TAP TITE(P) BIND 2.6x8	
209	8102230804	SCREW, BIND M3x8	

Ref. No.	Part No.	Description	Remarks
210	8110E26804	SCREW, TAP TITE(P) WH10 M2.6x8	
600	A2C518X650	DVD MECHA ASS'Y A2C518X650	
---	791WHA0100	GIFT SHEET	
---	792WHA0501	PACKAGE, FRONT	
---	792WHA0515	PACKAGE, BACK	
---	793WCDB880	GIFT BOX (PV-D744S)	
	793WCDB924	GIFT BOX (PV-D734S)	
---	795WCA0662	PAD, DVD/VR 155x250	
---	A2C518X975	INSTRUCTION BOOK KIT	
---	J2C51801A	INSTRUCTION BOOK	
---	J2C51828A	WARNING SHEET	
---	J5B02317B	REGISTRATION CARD	
---	J5B02329A	INFORMATION SHEET	
---	JA5U0400	POLY BAG(RED CAUTION)INSTRUCTION	

23.2. CHASSIS REPLACEMENT PARTS LIST

Ref. No.	Part No.	Description	Remarks
300	A2C303N420K	DECK ASSY A2C303N420K	
301	850A400234	PINCH ROLLER BLOCK	
302	850A500026	AHC ASS'Y	
303	850P200290	BELT, CAPSTAN (S)	
304	850P600581	WORM	
305	850P500083	BASE, AC HEAD	
306	850P800324	SPRING, AC HEAD	
307	850A000459	MAIN CHASSIS ASS'Y	
308	850A200089	CLUTCH ASS'Y	
309	850A200090	ARM IDLER ASS'Y	
310	850A300065	LOADING ARM S UNIT	
311	850A300066	LOADING ARM T UNIT	
312	850A400223	INCLINED BASE T UNIT 3S	
313	850A400232	P5 ARM ASS'Y 2	
314	850A400235	TENSION ARM ASS'Y 2	
315	850A400231	INCLINED BASE S UNIT	
316	850P800367	SPRING, LOCKER	
317	850P900736	CASS, HOLDER	
318	850P900748	CASS, SIDE L	
319	850P900749	CASS, SIDE R	
320	850P900739	LOCKER, R	
321	850A900228	LINK UNIT	
322	850P000496	POST, CASS GUIDE	
323	850P200316	REEL, S (S)	
324	850P200317	REEL, T (S)	
325	850P200308	GEAR, IDLER	
326	850P200311	GEAR, CLUTCH	
327	850P200312	GEAR, COUPLING	
328	850P200313	LEVER, CLUTCH	

Ref. No.	Part No.	Description	Remarks
329	85OP300194	GEAR, MAIN LOADING	
330	85OP400490	LEVER, TENSION	
331	85OP400492	HOLDER, TENSION	
332	85OP400520	CAP.P4	
333	85OP400542	BAND, TENSION	
334	85OP400533	CONNECT, TENSION	
335	85OP600573	ARM, BRAKE T	
336	85OP600584	BAND, BRAKE T	
337	85OP600577	CAM, PINCH ROLLER	
338	85OP600578	CAM, MAIN	
339	85OP600579	ROD, MAIN	
340	85OP600582	GEAR, JOINT	
341	85OP800322	SPRING, TENSION	
342	85OP800360	SPRING, BRAKE T	
343	85OP800355	SPRING, COUPLING	
344	85OP800356	SPRING, RING	
345	85OP900750	LEVER, LINK 2	
346	85OP900744	LEVER, FLAP	
347	85OP900745	CASS, OPENER	
348	85OP700035	REFLECTOR, LED	
349	85OP900746	BRACKET, TOP 3V	
501	8107226804	SCREW, TAP TITE(S) BIND 2.6x8	
502	83ETW30000	E-RING 3	
503	8107226404	SCREW, TAP TITE(S) BIND 2.6x4	
504	8102120604	SCREW, PAN M2x6	
505	8109126604	SCREW, TAP TITE(B) PAN 2.6x6	
506	810A130404	SCREW/WASHER(A) M3x4	
507	810A126504	SCREW/WASHER(A) M2.6x5	
508	82Q264713N	POLYSLIDER WASHER 2.6x4.7xT0.13	
509	82P184505N	POLYSLIDER WASHER(CUT) 1.8x4.5xT0.5	
510	8107226604	SCREW, TAP TITE(S) BIND 2.6x6	
CD1501	122H071704	CORD JUMPER 2H071704	
CD1502	122Y021902	CORD JUMPER 2Y021902	
H5001	1523Q91003	HEAD (AUDIO CONTROL) VTR-1X2RPE22-756	
H5002	1543Q02014	HEAD (FULL ERASE) VTR-1X2ERS11-154	
M101	1596P98001	MOTOR (LOADING) MXN13FB12K3 or	
	1596S98001	MOTOR (LOADING) MDB2B66	
M2001	1510S98038	CAPSTAN DD UNIT F2QVB33	
M2003	1589S11017	MICRO MOTOR I2OAL05	
UN4001	A2C301N500	CYLINDER UNIT ASS'Y A2C301N500	






23.3. ELECTRICAL REPLACEMENT PARTS LIST

RESISTOR

RC..... CARBON RESISTOR

CAPACITORS**CC..... CERAMIC CAPACITOR****CE..... ALUMI ELECTROLYTIC CAPACITOR****CP..... POLYESTER CAPACITOR****CPP..... POLYPROPYLENE CAPACITOR****CPL..... PLASTIC CAPACITOR****CMP..... METAL POLYESTER CAPACITOR****CMPL..... METAL PLASTIC CAPACITOR****CMPP..... METAL POLYPROPYLENE CAPACITOR**

Ref. No.	Part No.	Description	Remarks
		RESISTORS	
R101	R803R9561J	RC 560 OHM 1/16W	
R102	R803R9103J	RC 10K OHM 1/16W	
R103	R803R9103J	RC 10K OHM 1/16W	
R105	R803R9102J	RC 1K OHM 1/16W	
R106	R803R9681J	RC 680 OHM 1/16W	
R107	R803R9332J	RC 3.3K OHM 1/16W	
R108	R803R9223J	RC 22K OHM 1/16W	
R109	R002T4102J	RC 1K OHM 1/4W	
R110	R803R9822J	RC 8.2K OHM 1/16W	
R111	R803R9822J	RC 8.2K OHM 1/16W	
R112	R803R9334J	RC 330K OHM 1/16W	
R113	R803R9221J	RC 220 OHM 1/16W	
R114	R803R9203J	RC 20K OHM 1/16W	
R115	R803R9821J	RC 820 OHM 1/16W	
R116	R803R9223J	RC 22K OHM 1/16W	
R117	R803R9103J	RC 10K OHM 1/16W	
R119	R803R9222J	RC 2.2K OHM 1/16W	
R120	R803R9221J	RC 220 OHM 1/16W	
R121	R803R9102J	RC 1K OHM 1/16W	
R122	R803R9104J	RC 100K OHM 1/16W	
R123	R002T4222J	RC 2.2K OHM 1/4W	
R124	R803R9823J	RC 82K OHM 1/16W	
R126	R803R9182J	RC 1.8K OHM 1/16W	
R127	R803R9684J	RC 680K OHM 1/16W	
R129	R803R9182J	RC 1.8K OHM 1/16W	
R131	R803R9152J	RC 1.5K OHM 1/16W	
R132	R803R9332J	RC 3.3K OHM 1/16W	
R133	R803R9822J	RC 8.2K OHM 1/16W	
R136	R803R9223J	RC 22K OHM 1/16W	
R137	R002T4123J	RC 12K OHM 1/4W	
R138	R803R9223J	RC 22K OHM 1/16W	
R139	R803R9123J	RC 12K OHM 1/16W	
R140	R002T4222J	RC 2.2K OHM 1/4W	
R141	R803R9102J	RC 1K OHM 1/16W	
R142	R803R9102J	RC 1K OHM 1/16W	
R143	R803R9102J	RC 1K OHM 1/16W	

Ref. No.	Part No.	Description	Remarks
R301	R803R9333J	RC 33K OHM 1/16W	
R302	R803R9102J	RC 1K OHM 1/16W	
R304	R803R9103J	RC 10K OHM 1/16W	
R305	R803R9102J	RC 1K OHM 1/16W	
R306	R803R9121J	RC 120 OHM 1/16W	
R501	R0G3K2335K	RC 3.3M OHM 1/2W	
R502	R3X181R82J	R, METAL OXIDE 0.82 OHM 1W	
R504	R002T2561J	RC 560 OHM 1/2W	
R506	R002T2105J	RC 1M OHM 1/2W	
R507	R803R9103J	RC 10K OHM 1/16W	
R508	R002T4101J	RC 100 OHM 1/4W	
R509	R803R9101J	RC 100 OHM 1/16W	
R510	R803R9104J	RC 100K OHM 1/16W	
R511	R803R9564J	RC 560K OHM 1/16W	
R512	R3X181683J	R, METAL OXIDE 68K OHM 1W	
R513	R002T2391J	RC 390 OHM 1/2W	
R514	R002T2221J	RC 220 OHM 1/2W	
R515	R803R9272J	RC 2.7K OHM 1/16W	
R516	R63581R22J	R, FUSE 0.22 OHM 1W	
R517	R002T2821J	RC 820 OHM 1/2W	
R518	R803R9151J	RC 150 OHM 1/16W	
R519	R803R9102J	RC 1K OHM 1/16W	
R520	R803R9332F	RC 3.3K OHM 1/16W	
R521	R803R9471J	RC 470 OHM 1/16W	
R522	R803R9332F	RC 3.3K OHM 1/16W	
R523	R803R9682J	RC 6.8K OHM 1/16W	
R524	R002T4101J	RC 100 OHM 1/4W	
R525	R803R9103J	RC 10K OHM 1/16W	
R526	R803R9122F	RC 1.2K OHM 1/16W	
R527	R002T4101J	RC 100 OHM 1/4W	
R528	R002T4392J	RC 3.9K OHM 1/4W	
R529	R803R9222J	RC 2.2K OHM 1/16W	
R530	R803R9470J	RC 47 OHM 1/16W	
R531	R803R9821F	RC 820 OHM 1/16W	
R532	R803R9103J	RC 10K OHM 1/16W	
R533	R002T4221J	RC 220 OHM 1/4W	
R534	R801R7223J	RC 22K OHM 1/10W	
R535	R801R7223J	RC 22K OHM 1/10W	
R536	R803R9561J	RC 560 OHM 1/16W	
R537	R803R9221J	RC 220 OHM 1/16W	
R538	R803R9221J	RC 220 OHM 1/16W	
R540	R803R9471J	RC 470 OHM 1/16W	
R541	R002T4223J	RC 22K OHM 1/4W	
R542	R803R9151J	RC 150 OHM 1/16W	
R543	R803R9104J	RC 100K OHM 1/16W	
R544	R002T4223J	RC 22K OHM 1/4W	
R545	R65584150J	R, FUSE 15 OHM 1/4W	
R552	R803R9101J	RC 100 OHM 1/16W	
R553	R002T4473J	RC 47K OHM 1/4W	
R554	R002T4103J	RC 10K OHM 1/4W	
R651	R002T4101J	RC 100 OHM 1/4W	
R653	R002T4151J	RC 150 OHM 1/4W	



Ref. No.	Part No.	Description	Remarks
R657	R803R9272J	RC 2.7K OHM 1/16W	
R658	R803R9182J	RC 1.8K OHM 1/16W	
R659	R803R9152J	RC 1.5K OHM 1/16W	
R661	R803R9821J	RC 820 OHM 1/16W	
R662	R803R9181J	RC 180 OHM 1/16W	
R663	R803R9181J	RC 180 OHM 1/16W	
R664	R803R9821J	RC 820 OHM 1/16W	
R665	R803R9181J	RC 180 OHM 1/16W	
R666	R803R9181J	RC 180 OHM 1/16W	
R667	R803R9181J	RC 180 OHM 1/16W	
R668	R803R9181J	RC 180 OHM 1/16W	
R669	R803R9821J	RC 820 OHM 1/16W	
R670	R803R9181J	RC 180 OHM 1/16W	
R671	R803R9821J	RC 820 OHM 1/16W	
R672	R803R9181J	RC 180 OHM 1/16W	
R673	R803R9181J	RC 180 OHM 1/16W	
R674	R803R9181J	RC 180 OHM 1/16W	
R675	R803R9821J	RC 820 OHM 1/16W	
R683	R801R7561J	RC 560 OHM 1/10W	
R684	R801R7561J	RC 560 OHM 1/10W	
R685	R002T4133J	RC 13K OHM 1/4W	
R686	R002T4682J	RC 6.8K OHM 1/4W	
R687	R002T4392J	RC 3.9K OHM 1/4W	
R688	R002T4272J	RC 2.7K OHM 1/4W	
R689	R002T4332J	RC 3.3K OHM 1/4W	
R690	R002T4223J	RC 22K OHM 1/4W	
R701	R803R9152J	RC 1.5K OHM 1/16W	
R702	R803R9152J	RC 1.5K OHM 1/16W	
R703	R803R9103J	RC 10K OHM 1/16W	
R704	R803R9103J	RC 10K OHM 1/16W	
R705	R803R9682J	RC 6.8K OHM 1/16W	
R706	R803R9473J	RC 47K OHM 1/16W	
R707	R803R9473J	RC 47K OHM 1/16W	
R708	R803R9682J	RC 6.8K OHM 1/16W	
R709	R803R9682J	RC 6.8K OHM 1/16W	
R710	R803R9473J	RC 47K OHM 1/16W	
R711	R803R9473J	RC 47K OHM 1/16W	
R712	R803R9682J	RC 6.8K OHM 1/16W	
R714	R803R9273J	RC 27K OHM 1/16W	
R716	R803R9332J	RC 3.3K OHM 1/16W	
R717	R803R9225J	RC 2.2M OHM 1/16W	
R718	R803R9102J	RC 1K OHM 1/16W	
R719	R803R9331J	RC 330 OHM 1/16W	
R721	R803R9153J	RC 15K OHM 1/16W	
R722	R803R9153J	RC 15K OHM 1/16W	
R723	R002T4471J	RC 470 OHM 1/4W	
R2301	R803R9102J	RC 1K OHM 1/16W	
R2303	R803R92R2J	RC 2.2 OHM 1/16W	
R2304	R803R92R2J	RC 2.2 OHM 1/16W	
R2305	R803R9513J	RC 51K OHM 1/16W	
R2306	R803R9562J	RC 5.6K OHM 1/16W	
R2307	R803R9273J	RC 27K OHM 1/16W	
R2308	R803R9203J	RC 20K OHM 1/16W	
R2309	R803R9471J	RC 470 OHM 1/16W	

Ref. No.	Part No.	Description	Remarks
R2310	R803R9562J	RC 5.6K OHM 1/16W	
R2312	R803R9562J	RC 5.6K OHM 1/16W	
R2313	R803R9562J	RC 5.6K OHM 1/16W	
R2314	R803R9562J	RC 5.6K OHM 1/16W	
R2316	R803R9203J	RC 20K OHM 1/16W	
R2318	R803R9562J	RC 5.6K OHM 1/16W	
R2319	R803R9273J	RC 27K OHM 1/16W	
R2321	R803R9513J	RC 51K OHM 1/16W	
R2322	R803R9472J	RC 4.7K OHM 1/16W	
R2323	R803R9332J	RC 3.3K OHM 1/16W	
R2324	R803R9102J	RC 1K OHM 1/16W	
R2325	R803R9682J	RC 6.8K OHM 1/16W	
R2326	R803R9822J	RC 8.2K OHM 1/16W	
R2327	R803R9472J	RC 4.7K OHM 1/16W	
R2328	R803R9472J	RC 4.7K OHM 1/16W	
R2329	R803R9102J	RC 1K OHM 1/16W	
R2330	R803R9102J	RC 1K OHM 1/16W	
R2331	R803R9471J	RC 470 OHM 1/16W	
R2334	R803R9103J	RC 10K OHM 1/16W	
R2337	R803R9103J	RC 10K OHM 1/16W	
R2601	R803R9472J	RC 4.7K OHM 1/16W	
R2602	R803R9185J	RC 1.8M OHM 1/16W	
R2603	R803R9133F	RC 13K OHM 1/16W	
R2604	R803R9273F	RC 27K OHM 1/16W	
R2605	R803R9103F	RC 10K OHM 1/16W	
R2607	R803R9122J	RC 1.2K OHM 1/16W	
R2608	R803R9122J	RC 1.2K OHM 1/16W	
R2609	R803R9122J	RC 1.2K OHM 1/16W	
R2610	R803R9512F	RC 5.1K OHM 1/16W	
R2611	R803R9472J	RC 4.7K OHM 1/16W	
R2612	R803R9472J	RC 4.7K OHM 1/16W	
R2613	R803R9472J	RC 4.7K OHM 1/16W	
R2614	R803R9123F	RC 12K OHM 1/16W	
R2615	R803R9100J	RC 10 OHM 1/16W	
R2616	R803R9102J	RC 1K OHM 1/16W	
R2617	R803R9102J	RC 1K OHM 1/16W	
R2618	R803R9100J	RC 10 OHM 1/16W	
R2619	R803R9101J	RC 100 OHM 1/16W	
R2620	R803R9472J	RC 4.7K OHM 1/16W	
R2621	R803R9101J	RC 100 OHM 1/16W	
R2622	R803R9472J	RC 4.7K OHM 1/16W	
R2623	R803R9472J	RC 4.7K OHM 1/16W	
R2624	R803R9472J	RC 4.7K OHM 1/16W	
R2625	R803R9472J	RC 4.7K OHM 1/16W	
R2626	R803R9472J	RC 4.7K OHM 1/16W	
R2627	R803R9152J	RC 1.5K OHM 1/16W	
R2628	R803R9223J	RC 22K OHM 1/16W	
R2629	R803R9152J	RC 1.5K OHM 1/16W	
R2630	R803R9223J	RC 22K OHM 1/16W	
R2631	R803R9105J	RC 1M OHM 1/16W	
R2632	R803R9472J	RC 4.7K OHM 1/16W	
R2635	R803R9472J	RC 4.7K OHM 1/16W	
R2643	R803R9102J	RC 1K OHM 1/16W	
R2644	R803R9222J	RC 2.2K OHM 1/16W	

Ref. No.	Part No.	Description	Remarks
R2645	R803R9102J	RC 1K OHM 1/16W	
R2646	R803R9222J	RC 2.2K OHM 1/16W	
R2647	R803R9472J	RC 4.7K OHM 1/16W	
R2648	R803R9133J	RC 13K OHM 1/16W	
R2649	R803R9101J	RC 100 OHM 1/16W	
R2650	R803R9472J	RC 4.7K OHM 1/16W	
R2651	R803R9472J	RC 4.7K OHM 1/16W	
R2652	R803R9101J	RC 100 OHM 1/16W	
R2653	R803R9101J	RC 100 OHM 1/16W	
R3001	R803R9562J	RC 5.6K OHM 1/16W	
R3002	R002T4121J	RC 120 OHM 1/4W	
R3003	R803R9332J	RC 3.3K OHM 1/16W	
R3004	R803R9274J	RC 270K OHM 1/16W	
R3006	R803R9473J	RC 47K OHM 1/16W	
R3007	R803R9682J	RC 6.8K OHM 1/16W	
R3008	R803R9102J	RC 1K OHM 1/16W	
R3009	R803R9472J	RC 4.7K OHM 1/16W	
R3010	R803R9103J	RC 10K OHM 1/16W	
R3011	R002T4473J	RC 47K OHM 1/4W	
R3012	R803R9563J	RC 56K OHM 1/16W	
R3014	R803R9563J	RC 56K OHM 1/16W	
R3015	R002T4473J	RC 47K OHM 1/4W	
R3016	R801R7271J	RC 270 OHM 1/10W	
R3017	R803R9561J	RC 560 OHM 1/16W	
R3019	R002T4473J	RC 47K OHM 1/4W	
R3020	R803R9561J	RC 560 OHM 1/16W	
R3022	R803R9154J	RC 150K OHM 1/16W	
R3025	R803R9471J	RC 470 OHM 1/16W	
R3026	R803R9274J	RC 270K OHM 1/16W	
R3027	R803R9153J	RC 15K OHM 1/16W	
R3028	R002T4473J	RC 47K OHM 1/4W	
R3029	R803R9472J	RC 4.7K OHM 1/16W	
R3030	R803R9562J	RC 5.6K OHM 1/16W	
R3031	R803R9105J	RC 1M OHM 1/16W	
R3032	R803R9103J	RC 10K OHM 1/16W	
R3033	R803R9103J	RC 10K OHM 1/16W	
R3034	R803R9105J	RC 1M OHM 1/16W	
R3035	R801R7103J	RC 10K OHM 1/10W	
R3037	R803R9473J	RC 47K OHM 1/16W	
R3038	R002T4472J	RC 4.7K OHM 1/4W	
R3043	R803R9474J	RC 470K OHM 1/16W	
R3044	R803R9332J	RC 3.3K OHM 1/16W	
R3045	R803R9332J	RC 3.3K OHM 1/16W	
R3046	R803R9103J	RC 10K OHM 1/16W	
R3047	R803R9103J	RC 10K OHM 1/16W	
R3049	R803R9473J	RC 47K OHM 1/16W	
R3050	R002T4101J	RC 100 OHM 1/4W	
R3051	R803R9183J	RC 18K OHM 1/16W	
R3053	R803R9474J	RC 470K OHM 1/16W	
R3055	R803R9223J	RC 22K OHM 1/16W	
R3056	R002T4102J	RC 1K OHM 1/4W	
R3057	R803R9223J	RC 22K OHM 1/16W	
R3062	R803R9102J	RC 1K OHM 1/16W	
R3063	R803R9102J	RC 1K OHM 1/16W	

Ref. No.	Part No.	Description	Remarks
R3083	R803R9333J	RC 33K OHM 1/16W	
R3087	R803R9333J	RC 33K OHM 1/16W	
R4001	R803R9391F	RC 390 OHM 1/16W	
R4002	R803R9750F	RC 75 OHM 1/16W	
R4003	R803R9750F	RC 75 OHM 1/16W	
R4004	R803R9820F	RC 82 OHM 1/16W	
R4005	R803R9750F	RC 75 OHM 1/16W	
R4008	R803R9101J	RC 100 OHM 1/16W	
R4012	R803R9105J	RC 1M OHM 1/16W	
R4014	R803R9472J	RC 4.7K OHM 1/16W	
R4016	R803R9101J	RC 100 OHM 1/16W	
R4018	R803R9472J	RC 4.7K OHM 1/16W	
R4019	R803R9330J	RC 33 OHM 1/16W	
R4020	R803R9330J	RC 33 OHM 1/16W	
R4021	R803R9330J	RC 33 OHM 1/16W	
R4022	R803R9103J	RC 10K OHM 1/16W	
R4023	R803R9472J	RC 4.7K OHM 1/16W	
R4024	R803R9472J	RC 4.7K OHM 1/16W	
R4025	R803R9221J	RC 220 OHM 1/16W	
R4026	R803R9101J	RC 100 OHM 1/16W	
R4027	R803R9101J	RC 100 OHM 1/16W	
R4031	R803R9472J	RC 4.7K OHM 1/16W	
R4032	R803R9511F	RC 510 OHM 1/16W	
R4033	R803R9100J	RC 10 OHM 1/16W	
R4034	R803R9102F	RC 1K OHM 1/16W	
R4035	R803R9472J	RC 4.7K OHM 1/16W	
R4036	R803R9472J	RC 4.7K OHM 1/16W	
R4037	R803R9472J	RC 4.7K OHM 1/16W	
R4038	R803R9472J	RC 4.7K OHM 1/16W	
R4039	R803R9472J	RC 4.7K OHM 1/16W	
R4040	R803R9472J	RC 4.7K OHM 1/16W	
R4041	R803R9472J	RC 4.7K OHM 1/16W	
R4042	R803R9680J	RC 68 OHM 1/16W	
R4043	R803R9103J	RC 10K OHM 1/16W	
R4044	R803R9103J	RC 10K OHM 1/16W	
R4045	R803R9472J	RC 4.7K OHM 1/16W	
R4046	R803R9472J	RC 4.7K OHM 1/16W	
R4047	R803R9330J	RC 33 OHM 1/16W	
R4048	R803R9473J	RC 47K OHM 1/16W	
R4049	R803R9472J	RC 4.7K OHM 1/16W	
R4050	R803R9472J	RC 4.7K OHM 1/16W	
R4051	R803R9472J	RC 4.7K OHM 1/16W	
R4052	R803R9472J	RC 4.7K OHM 1/16W	
R4053	R803R9102J	RC 1K OHM 1/16W	
R4054	R803R9102J	RC 1K OHM 1/16W	
R7306	R803R9103J	RC 10K OHM 1/16W	
R7307	R803R9103J	RC 10K OHM 1/16W	
R8001	R803R9750J	RC 75 OHM 1/16W	
R8009	R002T2471J	RC 470 OHM 1/2W	
R8010	R002T4750J	RC 75 OHM 1/4W	
R8011	R803R9101J	RC 100 OHM 1/16W	
R8012	R0X1X4101J	RC 100 OHM 1/4W	
R8014	R801R7391J	RC 390 OHM 1/10W	
R8015	R801R7391J	RC 390 OHM 1/10W	

Ref. No.	Part No.	Description	Remarks
R8016	R803R9222J	RC 2.2K OHM 1/16W	
R8017	R803R9222J	RC 2.2K OHM 1/16W	
R8019	R803R9750J	RC 75 OHM 1/16W	
R8032	R803R9471J	RC 470 OHM 1/16W	
R8056	R803R9471J	RC 470 OHM 1/16W	
R8059	R002T4472J	RC 4.7K OHM 1/4W	
R8101	R803R9103J	RC 10K OHM 1/16W	
R8102	R803R9104J	RC 100K OHM 1/16W	
R8103	R803R9104J	RC 100K OHM 1/16W	
R8104	R803R9103J	RC 10K OHM 1/16W	
R8105	R803R9473J	RC 47K OHM 1/16W	
R8106	R803R9473J	RC 47K OHM 1/16W	
R8107	R803R9103J	RC 10K OHM 1/16W	
R8108	R803R9103J	RC 10K OHM 1/16W	
R8109	R803R9123J	RC 12K OHM 1/16W	
R8110	R803R9123J	RC 12K OHM 1/16W	
R8111	R803R9103J	RC 10K OHM 1/16W	
R8112	R803R9471J	RC 470 OHM 1/16W	
R8113	R803R9560J	RC 56 OHM 1/16W	
R8114	R803R9102J	RC 1K OHM 1/16W	
R8115	R803R9471J	RC 470 OHM 1/16W	
R8116	R803R9103J	RC 10K OHM 1/16W	
R8117	R803R9103J	RC 10K OHM 1/16W	
R8118	R803R9102J	RC 1K OHM 1/16W	
R8119	R803R9474J	RC 470K OHM 1/16W	
R8120	R803R9472J	RC 4.7K OHM 1/16W	
R8121	R803R9332J	RC 3.3K OHM 1/16W	
R8122	R803R9102J	RC 1K OHM 1/16W	
R8123	R803R9472J	RC 4.7K OHM 1/16W	
R8124	R803R9102J	RC 1K OHM 1/16W	
R8128	R803R9102J	RC 1K OHM 1/16W	
R8129	R803R9103J	RC 10K OHM 1/16W	
R8130	R803R9222J	RC 2.2K OHM 1/16W	
R8131	R803R9152J	RC 1.5K OHM 1/16W	
R8132	R803R9332J	RC 3.3K OHM 1/16W	
R8133	R801R7221J	RC 220 OHM 1/10W	
R8134	R803R9471J	RC 470 OHM 1/16W	
R8135	R803R9471J	RC 470 OHM 1/16W	
R8136	R803R9680J	RC 68 OHM 1/16W	
R8137	R803R9104J	RC 100K OHM 1/16W	
R8151	R803R9103J	RC 10K OHM 1/16W	
		CAPACITORS	
C101	P232W1223J	CMP 0.022 UF 100V MMTS	
C103	E50HU0220M	CE 22 UF 6.3V	
C104	E50HU0221M	CE 220 UF 6.3V	
C105	E50HU0220M	CE 22 UF 6.3V	
C106	CS0PB0414K	CC 0.01 UF 50V B	
C107	CS0PB04E4K	CC 0.015 UF 50V B	
C108	CS0PB0414K	CC 0.01 UF 50V B	
C109	CS0PB0215K	CC 0.1 UF 16V B	
C110	E02LU2470M	CE 47 UF 16V	
C112	E50HU0221M	CE 220 UF 6.3V	

Ref. No.	Part No.	Description	Remarks
C114	CS0PB0215K	CC 0.1 UF 16V B	
C115	E50HU1330M	CE 33 UF 10 V	
C116	CS0PF0315Z	CC 0.1 UF 25V F	
C117	CS0PB0414K	CC 0.01 UF 50V B	
C118	CS0PB0414K	CC 0.01 UF 50V B	
C119	E50HU2100M	CE 10 UF 16V	
C120	E50HU5010M	CE 1 UF 50V	
C121	CS0PB04K3K	CC 0.0027UF 50V B	
C122	CS0PB04B3K	CC 0.0012UF 50V B	
C123	E02LU54R7M	CE 4.7 UF 50V	
C124	E50HU5010M	CE 1 UF 50V	
C125	CS0PCH4L2J	CC 330 PF 50V CH	
C126	CS0PB0215K	CC 0.1 UF 16V B	
C127	CS0PCH4E2J	CC 150 PF 50V CH	
C129	CS0RB0216K	CC 1 UF 16V B	
C131	E50HU0101M	CE 100 UF 6.3V	
C132	E50HU5010M	CE 1 UF 50V	
C133	CS0PF0N16Z	CC 1 UF 10V F	
C134	E50HU5010M	CE 1 UF 50V	
C135	E02LU5R22M	CE 0.22 UF 50V	
C136	E02LU4220M	CE 22 UF 35V	
C137	E50HU5010M	CE 1 UF 50V	
C138	E02LU5010M	CE 1 UF 50V	
C139	CS0PF0315Z	CC 0.1 UF 25V F	
C140	E00NU54R7M	CE 4.7 UF 50 V	
C141	CS0PB0414K	CC 0.01 UF 50V B	
C142	E50HU2470M	CE 47 UF 16V	
C143	CS0PF0N16Z	CC 1 UF 10V F	
C144	CS0PB0414K	CC 0.01 UF 50V B	
C145	CS0PB04H4K	CC 0.022 UF 50V B	
C146	E50HU5010M	CE 1 UF 50V	
C147	CS0PB04H4K	CC 0.022 UF 50V B	
C148	E50HU5010M	CE 1 UF 50V	
C151	E50HU5010M	CE 1 UF 50V	
C152	E02LU2470M	CE 47 UF 16V	
C154	CS0PB0215K	CC 0.1 UF 16V B	
C155	CS0RB0216K	CC 1 UF 16V B	
C156	CS0RF0415Z	CC 0.1 UF 50V F	
C158	CS0PB0215K	CC 0.1 UF 16V B	
C159	CS0PCH4H1J	CC 22 PF 50V CH	
C162	CS0PB0215K	CC 0.1 UF 16V B	
C163	E50HU0470M	CE 47 UF 6.3V	
C165	CS0PF04Q4Z	CC 0.047 UF 50V F	
C166	CS0RB04U4K	CC 0.068 UF 50V B	
C169	CS0PF04Q4Z	CC 0.047 UF 50V F	
C172	CS0PCH4H1J	CC 22 PF 50V CH	
C174	E50HU0470M	CE 47 UF 6.3V	
C301	CS0PF0414Z	CC 0.01 UF 50V F	
C303	CS0PF0415Z	CC 0.1 UF 50V F	
C307	CS0PCH412J	CC 100 PF 50V CH	
C308	CS0PB0414K	CC 0.01 UF 50V B	
C309	E02LU0221M	CE 220 UF 6.3V	
C313	E50HU2100M	CE 10 UF 16V	
C315	E50HU2100M	CE 10 UF 16V	

Ref. No.	Part No.	Description	Remarks
C318	E50HU2100M	CE 10 UF 16V	
C501	E02LF2222M	CE 2200 UF 16V	⚠
C502	P2122B104M	CMP 0.1 UF 275V ECQUL	⚠
C504	E02LU0221M	CE 220 UF 6.3V	
C505	E02LU2101M	CE 100 UF 16V	⚠
C506	E02LU0471M	CE 470 UF 6.3V	
C507	CS0RF02H6Z	CC 2.2 UF 16V F	
C508	CS0PB04W3K	CC 0.0082UF 50V B	
C509	P1F4T0183J	CP 0.018 UF 50V	
C510	E02LU5220M	CE 22 UF 50V	⚠
C511	E0MV0C370M	CE 200V 37UF	⚠
C512	CS0PF0N16Z	CC 1 UF 10V F	
C513	C0PLRR7H2K	CC 220 PF 2KV R	
C514	E02LU2101M	CE 100 UF 16V	⚠
C515	C0J0B0514K	CC 0.01 UF 500V B	⚠
C516	CD39E0MQ3M	CC 0.0047UF 250V	⚠
C517	CS0PF0N16Z	CC 1 UF 10V F	
C518	E62F00222M	CE 2200 UF 6.3V	⚠
C519	E02L01222M	CE 2200 UF 10V	⚠
C521	E02LU2101M	CE 100 UF 16V	⚠
C522	E02LU5220M	CE 22 UF 50V	⚠
C524	CS0PB04H4K	CC 0.022 UF 50V B	
C525	C0PLRR7U2K	CC 680 PF 2KV R	
C527	CS0PB04W3K	CC 0.0082UF 50V B	
C528	E02LU2101M	CE 100 UF 16V	
C530	E02LU2101M	CE 100 UF 16V	
C531	C0JTB05S2K	CC 560 PF 500V B	
C534	CS0PF0N16Z	CC 1 UF 10V F	
C540	E0MV0C370M	CE 200V 37UF	⚠
C541	CS0RF02H6Z	CC 2.2 UF 16V F	
C652	E02LU0101M	CE 100 UF 6.3V	
C653	E02LU1471M	CE 470 UF 10V	
C701	CS0PB04H4K	CC 0.022 UF 50V B	
C702	E50HU53R3M	CE 3.3 UF 50V	
C703	E02LU54R7M	CE 4.7 UF 50V	
C704	E50HU5010M	CE 1 UF 50V	
C705	E50HU54R7M	CE 4.7 UF 50V	
C706	E50HU5010M	CE 1 UF 50V	
C707	CS0PB0215K	CC 0.1 UF 16V B	
C708	E50HU2100M	CE 10 UF 16V	
C709	E50HU5100M	CE 10 UF 50V	
C710	CS0PCH4U2J	CC 680 PF 50V CH	
C711	E50HU5100M	CE 10 UF 50V	
C712	CS0PF0N16Z	CC 1 UF 10V F	
C713	CS0PF0N16Z	CC 1 UF 10V F	
C714	E50HU2100M	CE 10 UF 16V	
C715	CS0PB04B3K	CC 0.0012UF 50V B	
C716	CS0PF0N16Z	CC 1 UF 10V F	
C717	CS0PCH4U2J	CC 680 PF 50V CH	
C718	CS0PF0N16Z	CC 1 UF 10V F	

Ref. No.	Part No.	Description	Remarks
C719	CS0PF0N16Z	CC 1 UF 10V F	
C720	E02LU5330M	CE 33 UF 50V	
C721	CS0PB04B3K	CC 0.0012UF 50V B	
C722	CS0PB0215K	CC 0.1 UF 16V B	
C723	CS0PF0414Z	CC 0.01 UF 50V F	
C724	CS0PF0414Z	CC 0.01 UF 50V F	
C725	CS0PB0215K	CC 0.1 UF 16V B	
C726	CS0PB04E4K	CC 0.015 UF 50V B	
C727	E50HU2100M	CE 10 UF 16V	
C728	E50HU5100M	CE 10 UF 50V	
C729	CS0PB0414K	CC 0.01 UF 50V B	
C730	CS0PB04E4K	CC 0.015 UF 50V B	
C731	E50HU5R22M	CE 0.22 UF 50 V	
C732	CS0PF0414Z	CC 0.01 UF 50V F	
C734	CS0PB0215K	CC 0.1 UF 16V B	
C735	E02LU54R7M	CE 4.7 UF 50V	
C736	CS0PB0413K	CC 0.001 UF 50V B	
C737	E50HU54R7M	CE 4.7 UF 50V	
C738	CS0PF0414Z	CC 0.01 UF 50V F	
C739	E50HU2470M	CE 47 UF 16V	
C740	E50HU3330M	CE 33 UF 25 V	
C741	E50HU2100M	CE 10 UF 16V	
C742	E50HU2100M	CE 10 UF 16V	
C743	E50HU5R22M	CE 0.22 UF 50 V	
C744	CS0PF0315Z	CC 0.1 UF 25V F	
C746	CS0PF0315Z	CC 0.1 UF 25V F	
C747	E02LU5100M	CE 10 UF 50V	
C748	CS0PF0315Z	CC 0.1 UF 25V F	
C749	CS0PF0315Z	CC 0.1 UF 25V F	
C750	E50HU52R2M	CE 2.2 UF 50V	
C751	CS0PF0315Z	CC 0.1 UF 25V F	
C752	E50HU2220M	CE 22 UF 16 V	
C754	E50HU2470M	CE 47 UF 16V	
C755	CS0PB04H4K	CC 0.022 UF 50V B	
C756	E50HU2100M	CE 10 UF 16V	
C757	CS0PF0N16Z	CC 1 UF 10V F	
C758	E50HU2220M	CE 22 UF 16 V	
C759	E50HU4220M	CE 22 UF 35 V	
C760	CS0PF0N16Z	CC 1 UF 10V F	
C761	E50HU0470M	CE 47 UF 6.3V	
C762	CS0PCH4U2J	CC 680 PF 50V CH	
C763	CS0PCH4U2J	CC 680 PF 50V CH	
C2301	CS0PF0315Z	CC 0.1 UF 25V F	
C2302	CS0PB0215K	CC 0.1 UF 16V B	
C2303	CS0PB0215K	CC 0.1 UF 16V B	
C2304	CS0PCH4H2J	CC 220 PF 50V CH	
C2305	CS0PCH4H2J	CC 220 PF 50V CH	
C2306	CS0PF0315Z	CC 0.1 UF 25V F	
C2307	CS0PB0215K	CC 0.1 UF 16V B	
C2308	CS0PB0215K	CC 0.1 UF 16V B	
C2309	CS0PB0413K	CC 0.001 UF 50V B	
C2310	E02LU2470M	CE 47 UF 16V	
C2311	CS0PB0215K	CC 0.1 UF 16V B	
C2312	CS0PB0413K	CC 0.001 UF 50V B	

Ref. No.	Part No.	Description	Remarks
C2603	CS0PB04H3K	CC 0.0022UF 50V B	
C2604	CS0PB04H3K	CC 0.0022UF 50V B	
C2605	CS0PB04H3K	CC 0.0022UF 50V B	
C2606	CS0PB04H3K	CC 0.0022UF 50V B	
C2607	CS0PCH4L1J	CC 33 PF 50V CH	
C2608	E02LU2470M	CE 47 UF 16V	
C2609	CS0PF0315Z	CC 0.1 UF 25V F	
C2610	CS0PB04U3K	CC 0.0068UF 50V B	
C2611	CS0PF0315Z	CC 0.1 UF 25V F	
C2612	CS0PB03L4K	CC 0.033 UF 25V B	
C2613	CS0PCH4H2J	CC 220 PF 50V CH	
C2614	CS0PB0215K	CC 0.1 UF 16V B	
C2615	CS0PF0315Z	CC 0.1 UF 25V F	
C2616	CS0PCH4Q2J	CC 470 PF 50V CH	
C2617	CS0PB0215K	CC 0.1 UF 16V B	
C2618	CS0PB0215K	CC 0.1 UF 16V B	
C2619	CS0PCH4S2J	CC 560 PF 50V CH	
C2620	CS0PB04S3K	CC 0.0056UF 50V B	
C2621	CS0PB04S3K	CC 0.0056UF 50V B	
C2622	CS0PB04S3K	CC 0.0056UF 50V B	
C2623	CS0PF0315Z	CC 0.1 UF 25V F	
C2624	CS0PB0413K	CC 0.001 UF 50V B	
C2625	CS0PB0413K	CC 0.001 UF 50V B	
C2626	CS0PF0315Z	CC 0.1 UF 25V F	
C2627	CS0PB03L4K	CC 0.033 UF 25V B	
C2628	CS0PB0413K	CC 0.001 UF 50V B	
C2629	CS0PB0413K	CC 0.001 UF 50V B	
C2632	CS0PF0315Z	CC 0.1 UF 25V F	
C2633	CS0PB0413K	CC 0.001 UF 50V B	
C2634	CS0PF0315Z	CC 0.1 UF 25V F	
C2635	CS0PB0413K	CC 0.001 UF 50V B	
C2636	CS0PF0315Z	CC 0.1 UF 25V F	
C2637	CS0PF0315Z	CC 0.1 UF 25V F	
C2638	CS0PF0315Z	CC 0.1 UF 25V F	
C2639	CS0PF0315Z	CC 0.1 UF 25V F	
C2640	E02LU0101M	CE 100 UF 6.3V	
C2641	E02LU0101M	CE 100 UF 6.3V	
C2642	CS0PF0315Z	CC 0.1 UF 25V F	
C2643	E02LU2470M	CE 47 UF 16V	
C2644	E02LU2470M	CE 47 UF 16V	
C2645	CS0PF0315Z	CC 0.1 UF 25V F	
C2646	E02LU2470M	CE 47 UF 16V	
C2647	CS0PF0315Z	CC 0.1 UF 25V F	
C2648	CS0PF0315Z	CC 0.1 UF 25V F	
C2649	CS0PB0215K	CC 0.1 UF 16V B	
C2654	CS0PB0414K	CC 0.01 UF 50V B	
C2655	CS0PB0414K	CC 0.01 UF 50V B	
C2657	CS0PCH412J	CC 100 PF 50V CH	
C2658	CS0PCH412J	CC 100 PF 50V CH	
C2659	CS0PCH412J	CC 100 PF 50V CH	
C2660	CS0PCH412J	CC 100 PF 50V CH	
C3001	CS0RB0216K	CC 1 UF 16V B	
C3002	CS0PB0414K	CC 0.01 UF 50V B	
C3004	CS0PB04H4K	CC 0.022 UF 50V B	

Ref. No.	Part No.	Description	Remarks
C3005	CS0PB0413K	CC 0.001 UF 50V B	
C3006	CS0PB0413K	CC 0.001 UF 50V B	
C3007	CS0PB0215K	CC 0.1 UF 16V B	
C3008	CS0PB04Q3K	CC 0.0047UF 50V B	
C3009	CS0PB0215K	CC 0.1 UF 16V B	
C3010	CS0PB0413K	CC 0.001 UF 50V B	
C3013	E50HU0220M	CE 22 UF 6.3V	
C3014	CS0PF0315Z	CC 0.1 UF 25V F	
C3015	CS0PCH4W2J	CC 820 PF 50V CH	
C3016	E50HU0470M	CE 47 UF 6.3V	
C3017	CS0PB0413K	CC 0.001 UF 50V B	
C3018	CS0PCH4E2J	CC 150 PF 50V CH	
C3019	CS0PB0215K	CC 0.1 UF 16V B	
C3020	CS0PB04H4K	CC 0.022 UF 50V B	
C3021	E50HU2100M	CE 10 UF 16V	
C3022	CS0PCH4Q2J	CC 470 PF 50V CH	
C3023	E02LU0471M	CE 470 UF 6.3V	
C3024	CS0PCH4E1J	CC 15 PF 50V CH	
C3025	CS0PCH4B1J	CC 12 PF 50V CH	
C3027	CS0PF0315Z	CC 0.1 UF 25V F	
C3029	E50HU0470M	CE 47 UF 6.3V	
C3030	CS0PF0N16Z	CC 1 UF 10V F	
C3031	CS0PB04E3K	CC 0.0015UF 50V B	
C3032	E50HU52R2M	CE 2.2 UF 50V	
C3033	E02LT4331M	CE 330 UF 35V	
C3034	CS0PF0N16Z	CC 1 UF 10V F	
C3036	CS0PF0315Z	CC 0.1 UF 25V F	
C3038	CS0PF0N16Z	CC 1 UF 10V F	
C3040	CS0PF0N16Z	CC 1 UF 10V F	
C3041	CS0PB04E3K	CC 0.0015UF 50V B	
C3044	CS0PCH4B1J	CC 12 PF 50V CH	
C3045	E50HU5R47M	CE 0.47 UF 50V	
C3049	CS0PCH412J	CC 100 PF 50V CH	
C3050	CS0PB0414K	CC 0.01 UF 50V B	
C3052	E50HU0220M	CE 22 UF 6.3V	
C3053	CS0PB0215K	CC 0.1 UF 16V B	
C3061	CS0PF0315Z	CC 0.1 UF 25V F	
C3065	CS0PF0315Z	CC 0.1 UF 25V F	
C4001	CS0PF0315Z	CC 0.1 UF 25V F	
C4002	CS0PF0315Z	CC 0.1 UF 25V F	
C4003	CS0PF0315Z	CC 0.1 UF 25V F	
C4004	CS0PF0315Z	CC 0.1 UF 25V F	
C4005	CS0PF0315Z	CC 0.1 UF 25V F	
C4006	CS0PF0315Z	CC 0.1 UF 25V F	
C4007	CS0PF0315Z	CC 0.1 UF 25V F	
C4008	CS0PF0315Z	CC 0.1 UF 25V F	
C4009	E02LU0101M	CE 100 UF 6.3V	
C4010	CS0PF0315Z	CC 0.1 UF 25V F	
C4011	E02LU0101M	CE 100 UF 6.3V	
C4012	CS0PF0315Z	CC 0.1 UF 25V F	
C4013	CS0PF0315Z	CC 0.1 UF 25V F	
C4014	CS0PF0315Z	CC 0.1 UF 25V F	
C4015	CS0PF0315Z	CC 0.1 UF 25V F	
C4016	CS0PF0315Z	CC 0.1 UF 25V F	

Ref. No.	Part No.	Description	Remarks
C4017	CS0PF0315Z	CC 0.1 UF 25V F	
C4018	CS0PF0315Z	CC 0.1 UF 25V F	
C4019	CS0PF0315Z	CC 0.1 UF 25V F	
C4020	CS0PF0315Z	CC 0.1 UF 25V F	
C4021	CS0PF0315Z	CC 0.1 UF 25V F	
C4022	CS0PCH4H1J	CC 22 PF 50V CH	
C4023	CS0PF0315Z	CC 0.1 UF 25V F	
C4024	CS0PF0315Z	CC 0.1 UF 25V F	
C4025	CS0PF0315Z	CC 0.1 UF 25V F	
C4026	CS0PF0315Z	CC 0.1 UF 25V F	
C4027	CS0PF0315Z	CC 0.1 UF 25V F	
C4028	CS0PF0315Z	CC 0.1 UF 25V F	
C4029	CS0PF0315Z	CC 0.1 UF 25V F	
C4030	CS0PF0315Z	CC 0.1 UF 25V F	
C4031	CS0PB0414K	CC 0.01 UF 50V B	
C4032	CS0PB0413K	CC 0.001 UF 50V B	
C4033	CS0PF0315Z	CC 0.1 UF 25V F	
C4035	CS0PCH4H1J	CC 22 PF 50V CH	
C4036	CS0PB0215K	CC 0.1 UF 16V B	
C4037	CS0PF0315Z	CC 0.1 UF 25V F	
C4038	CS0PB0414K	CC 0.01 UF 50V B	
C4039	CS0PF0315Z	CC 0.1 UF 25V F	
C4040	CS0PF0315Z	CC 0.1 UF 25V F	
C4041	CS0PF0315Z	CC 0.1 UF 25V F	
C4044	CS0PF0315Z	CC 0.1 UF 25V F	
C4045	CS0PF0315Z	CC 0.1 UF 25V F	
C4046	CS0PF0315Z	CC 0.1 UF 25V F	
C4047	CS0PF0315Z	CC 0.1 UF 25V F	
C4050	CS0PF0315Z	CC 0.1 UF 25V F	
C4051	E02LU0471M	CE 470 UF 6.3V	
C4062	CS0PF0315Z	CC 0.1 UF 25V F	
C4063	E02LU0101M	CE 100 UF 6.3V	
C4064	CS0PF0315Z	CC 0.1 UF 25V F	
C4065	CS0PB0414K	CC 0.01 UF 50V B	
C4066	CS0PB0N16K	CC 1 UF 10V B	
C4067	E02LU2470M	CE 47 UF 16V	
C4068	E02LU2470M	CE 47 UF 16V	
C4069	E02LU2470M	CE 47 UF 16V	
C4070	E02LU2470M	CE 47 UF 16V	
C4071	E02LU2470M	CE 47 UF 16V	
C4072	CS0PF0315Z	CC 0.1 UF 25V F	
C4073	CS0PF0315Z	CC 0.1 UF 25V F	
C4074	CS0PF0315Z	CC 0.1 UF 25V F	
C4075	CS0PF0315Z	CC 0.1 UF 25V F	
C4076	CS0PF0315Z	CC 0.1 UF 25V F	
C4077	CS0PF0315Z	CC 0.1 UF 25V F	
C4078	E02LU2470M	CE 47 UF 16V	
C4079	CS0PCH412J	CC 100 PF 50V CH	
C4080	CS0PB0414K	CC 0.01 UF 50V B	
C4081	CS0PF0315Z	CC 0.1 UF 25V F	
C4082	CS0PF0315Z	CC 0.1 UF 25V F	
C4083	E02LU2470M	CE 47 UF 16V	
C4084	E02LU2470M	CE 47 UF 16V	
C4085	CS0PB0413K	CC 0.001 UF 50V B	

Ref. No.	Part No.	Description	Remarks
C4086	CS0PB0413K	CC 0.001 UF 50V B	
C4087	CS0PB0414K	CC 0.01 UF 50V B	
C4088	CS0PB0414K	CC 0.01 UF 50V B	
C4089	CS0PB0414K	CC 0.01 UF 50V B	
C4090	CS0PB0414K	CC 0.01 UF 50V B	
C4091	CS0PCH412J	CC 100 PF 50V CH	
C4092	CS0PCH412J	CC 100 PF 50V CH	
C4093	CS0PCH412J	CC 100 PF 50V CH	
C4094	CS0PCH412J	CC 100 PF 50V CH	
C4095	CS0PB0414K	CC 0.01 UF 50V B	
C4096	CS0PB0413K	CC 0.001 UF 50V B	
C4097	CS0PB0414K	CC 0.01 UF 50V B	
C4098	CS0PCH411D	CC 10 PF 50V CH	
C7301	CS0PF0315Z	CC 0.1 UF 25V F	
C7302	E02LU2101M	CE 100 UF 16V	
C7303	E02LU5220M	CE 22 UF 50V	
C7304	CS0PF0315Z	CC 0.1 UF 25V F	
C7305	CS0PCH4W2J	CC 820 PF 50V CH	
C7306	CS0PCH4W2J	CC 820 PF 50V CH	
C7308	E02LU52R2M	CE 2.2 UF 50V	
C7310	E02LU52R2M	CE 2.2 UF 50V	
C7311	E02LU5100M	CE 10 UF 50V	
C8001	CS0RCH4Q2J	CC 470 PF 50V CH	
C8002	CS0RCH4Q2J	CC 470 PF 50V CH	
C8003	E02LU5100M	CE 10 UF 50V	
C8004	CS0PCH4Q2J	CC 470 PF 50V CH	
C8013	E02LU5100M	CE 10 UF 50V	
C8014	CS0PF0315Z	CC 0.1 UF 25V F	
C8015	E02LU0471M	CE 470 UF 6.3V	
C8019	E50HU2100M	CE 10 UF 16V	
C8031	E50HU54R7M	CE 4.7 UF 50V	
C8032	E00NU24R7M	CE 4.7 UF 16 V	
C8040	E50HU54R7M	CE 4.7 UF 50V	
C8042	E50HU2100M	CE 10 UF 16V	
C8053	E50HU2100M	CE 10 UF 16V	
C8057	CS0PF0315Z	CC 0.1 UF 25V F	
C8059	CS0PF0415Z	CC 0.1 UF 50V F	
C8075	E50HU54R7M	CE 4.7 UF 50V	
C8099	CS0PCH4Q2J	CC 470 PF 50V CH	
C8101	E02LU5330M	CE 33 UF 50V	
C8102	CS0PCH412J	CC 100 PF 50V CH	
C8105	CS0PB04E3K	CC 0.0015UF 50V B	
C8106	CS0PB04E3K	CC 0.0015UF 50V B	
C8107	CS0PCH412J	CC 100 PF 50V CH	
C8110	CS0PF0315Z	CC 0.1 UF 25V F	
C8111	E02LU2101M	CE 100 UF 16V	
C8112	E02LU5220M	CE 22 UF 50V	
C8113	E02LU5220M	CE 22 UF 50V	
C8114	E02LU52R2M	CE 2.2 UF 50V	
C8115	E02LU54R7M	CE 4.7 UF 50V	
C8118	E02LU52R2M	CE 2.2 UF 50V	
C8119	E02LU0221M	CE 220 UF 6.3V	
C8120	CS0PCH4H2J	CC 220 PF 50V CH	
C8121	CS0PB0414K	CC 0.01 UF 50V B	






Ref. No.	Part No.	Description	Remarks
C8122	E02LU2470M	CE 47 UF 16V	
C8123	CS0PB04H4K	CC 0.022 UF 50V B	
C8124	E02LU2470M	CE 47 UF 16V	
C8125	CS0PF0315Z	CC 0.1 UF 25V F	
C8126	CS0PB0215K	CC 0.1 UF 16V B	
C8129	CS0RCH412J	CC 100 PF 50V CH	
C8130	CS0PCH4E2J	CC 150 PF 50V CH	
C8131	CS0PCH4E2J	CC 150 PF 50V CH	
C8132	CS0PCH4E2J	CC 150 PF 50V CH	
C8133	CS0PCH4E2J	CC 150 PF 50V CH	
C8134	CS0PCH4B1J	CC 12 PF 50V CH	
C8135	CS0PCH4B1J	CC 12 PF 50V CH	
C8136	CS0PCH4B1J	CC 12 PF 50V CH	
C8137	CS0PCH4B1J	CC 12 PF 50V CH	
C8138	CS0PCH4E2J	CC 150 PF 50V CH	
C8139	CS0PCH4E2J	CC 150 PF 50V CH	
C8140	CS0PCH4E2J	CC 150 PF 50V CH	
C8141	CS0PCH4E2J	CC 150 PF 50V CH	
C8142	CS0RCH411D	CC 10 PF 50V CH	
C8143	CS0RCH411D	CC 10 PF 50V CH	
C8144	E02LU0471M	CE 470 UF 6.3V	
C8145	E02LU0471M	CE 470 UF 6.3V	
C8146	E02LU0471M	CE 470 UF 6.3V	
C8147	CS0RCH4L1J	CC 33 PF 50V CH	
C8148	CS0RCH4L1J	CC 33 PF 50V CH	
C8149	CS0RCH4L1J	CC 33 PF 50V CH	
		DIODES	
D502	D2WXN40050	DIODE, SILICON 1N4005-EIC	⚠
D503	D2WXN40050	DIODE, SILICON 1N4005-EIC	⚠
D504	D1VT001330	DIODE, SILICON 1SS133T-77	
D505	D2WXN40050	DIODE, SILICON 1N4005-EIC	⚠
D506	D2WXN40050	DIODE, SILICON 1N4005-EIC	⚠
D507	D23TGP15J0	DIODE, SILICON RGP15J-G23	⚠
D509	D2WXGP10J0	DIODE, RECTIFIER RGP10J-EIC	
D510	D97U02701B	DIODE, ZENER MTZJ27B T-77	⚠
D511	D28T21DQN4	DIODE, SCHOTTKY 21DQ04N-TA2B1	⚠
D512	D28T21DQN4	DIODE, SCHOTTKY 21DQ04N-TA2B1	⚠
D513	D2WXN40050	DIODE, SILICON 1N4005-EIC	⚠
D514	D97U01201B	DIODE, ZENER MTZJ12B T-77	
D515	D28T21DQN4	DIODE, SCHOTTKY 21DQ04N-TA2B1	⚠
D518	D1VT001330	DIODE, SILICON 1SS133T-77	
D522	D28TELS6N6	DIODE, RECTIFIER 10ELS6N-TA1B2	⚠
D523	D97U03301B	DIODE, ZENER MTZJ33B T-77	⚠
D524	D1VT001330	DIODE, SILICON 1SS133T-77	
D526	D97U03R31B	DIODE, ZENER MTZJ3.3B T-77	
D528	D1VT001330	DIODE, SILICON 1SS133T-77	
D530	D28TELS6N6	DIODE, RECTIFIER 10ELS6N-TA1B2	
D531	D97U09R11B	DIODE, ZENER MTZJ9.1B T-77	

Ref. No.	Part No.	Description	Remarks
D532	D97U03R31B	DIODE, ZENER MTZJ3.3B T-77	
D534	D1VT001330	DIODE, SILICON 1SS133T-77	
D535	D1VT001330	DIODE, SILICON 1SS133T-77	
D536	D1VT001330	DIODE, SILICON 1SS133T-77	
D537	D1VT001330	DIODE, SILICON 1SS133T-77	
D538	D1VT001330	DIODE, SILICON 1SS133T-77	
D539	D1VT001330	DIODE, SILICON 1SS133T-77	
D651	0021E5Q212	LED LTL-1CHGT-002A	
D656	D2WXN40050	DIODE, SILICON 1N4005-EIC	
D657	0021E5Q212	LED LTL-1CHGT-002A	
D685	0021E5Q212	LED LTL-1CHGT-002A	
D686	0021E5Q212	LED LTL-1CHGT-002A	
D701	D1VT001330	DIODE, SILICON 1SS133T-77	
D702	D97U05R11B	DIODE, ZENER MTZJ5.1B T-77	
D2601	DDARDS1200	DIODE, SILICON KDS120RTK	
D3001	0010E00330	INFRARED LED LTE-3271T-012A-O	
D3007	D1VT001330	DIODE, SILICON 1SS133T-77	
D3009	D1VT001330	DIODE, SILICON 1SS133T-77	
D8001	D97U06R81B	DIODE, ZENER MTZJ6.8B T-77	
D8002	D97U06R81B	DIODE, ZENER MTZJ6.8B T-77	
D8003	D97U06R81B	DIODE, ZENER MTZJ6.8B T-77	
D8008	D1VT001330	DIODE, SILICON 1SS133T-77	
D8101	DDRL41480	DIODE, SILICON MCL4148	
D8102	DDRL41480	DIODE, SILICON MCL4148	
D8103	DDRL41480	DIODE, SILICON MCL4148	
D8106	DDRL41480	DIODE, SILICON MCL4148	
D8107	DDRL41480	DIODE, SILICON MCL4148	
D8108	DDRL41480	DIODE, SILICON MCL4148	
D8109	DDRL41480	DIODE, SILICON MCL4148	
D8110	DDRL41480	DIODE, SILICON MCL4148	
D8111	DDRL41480	DIODE, SILICON MCL4148	
D8112	DDRL41480	DIODE, SILICON MCL4148	
D8113	DDRL41480	DIODE, SILICON MCL4148	
		ICS	
IC101	I03F3206M0	IC LA71206M-MPB	
IC501	I1KJ9A4310	IC KIA431	⚠
IC502	I1KA98R09A	IC KIA78R09API	⚠
IC503	000220001W	PHOTO COUPLER PS2561L1-1-V(W)	⚠
IC701	I01F63FBP0	IC AN3663FBP	
IC2301	I03F065600	IC LA6560	
IC2601	ICQK067070	IC ZR36707TQC	
IC2602	I07E00358F	IC BA10358F-E2	
IC3001	I54F50138B	IC OEC0138B	
IC3003	I9UF032310	IC PST3231NR	
IC3099	A2C518H015	IC AT24C04N-10SI-2.7 or	
	I5HJ004BF0	IC S-24C04BFJ-TB	
IC4001	ICQK067620	IC ZR36762	
IC4002	I5HJ004BF0	IC S-24C04BFJ-TB	
IC4003	I0GF9XZ010	IC PQ070XZ01ZP	
IC4005	IF9J0164A7	IC M12L64164A-7T	
IC4007	ICMJ0800A7	IC SST39VF800A-70-4C-EK	

Ref. No.	Part No.	Description	Remarks
IC7301	I17F0742K0	IC PCM1742KE/2K	
IC8002	I0UF015010	IC MM1501XNRE	
IC8005	I0UF015010	IC MM1501XNRE	
IC8101	I0QJ045800	IC NJM4580M(TE1)	
		TRANSISTORS	
Q101	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q102	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q103	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146	
Q104	TCAT032034	TRANSISTOR, SILICON KTC3203_Y-AT	
Q105	TAATA12660	TRANSISTOR, SILICON KTA1266-AT(Y, GR)	
Q106	TAAA1504SY	TRANSISTOR, SILICON KTA1504S_Y_RTK	
Q107	TAAA1504SY	TRANSISTOR, SILICON KTA1504S_Y_RTK	
Q109	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q301	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q501	TJXG5NC500	FET STP5NC50FP	⚠
Q502	TCAT032034	TRANSISTOR, SILICON KTC3203_Y-AT	⚠
Q503	TCAT03209Y	TRANSISTOR, SILICON KTC3209_Y-AT	⚠
Q504	TAAT012714	TRANSISTOR, SILICON KTA1271_Y-AT	⚠
Q505	TCAT03209Y	TRANSISTOR, SILICON KTC3209_Y-AT	⚠
Q506	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q507	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q508	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	⚠
Q509	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q510	TCAT032034	TRANSISTOR, SILICON KTC3203_Y-AT	⚠
Q511	TAAT01241Y	TRANSISTOR, SILICON KTA1241_Y-AT	⚠
Q513	T8YJ2412K0	TRANSISTOR, SILICON 2SC2412KT146 R, S	
Q514	T8YJ2412K0	TRANSISTOR, SILICON 2SC2412KT146 R, S	
Q530	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q531	T6YJ1037K0	TRANSISTOR, SILICON 2SA1037AKT146R, S	
Q651	TAAA1504SY	TRANSISTOR, SILICON KTA1504S_Y_RTK	
Q652	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q653	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q654	TAAA1504SY	TRANSISTOR, SILICON KTA1504S_Y_RTK	
Q655	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q656	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q657	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q658	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q659	TAAA1504SY	TRANSISTOR, SILICON KTA1504S_Y_RTK	
Q660	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q661	TAAA1504SY	TRANSISTOR, SILICON KTA1504S_Y_RTK	
Q662	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q663	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q664	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q665	TAAA1504SY	TRANSISTOR, SILICON KTA1504S_Y_RTK	
Q666	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146	
Q672	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146	
Q2601	T67J1036K0	TRANSISTOR, SILICON 2SA1036KT146	
Q2602	T67J1036K0	TRANSISTOR, SILICON 2SA1036KT146	
Q2603	T27T030180	FET 2SK3018	

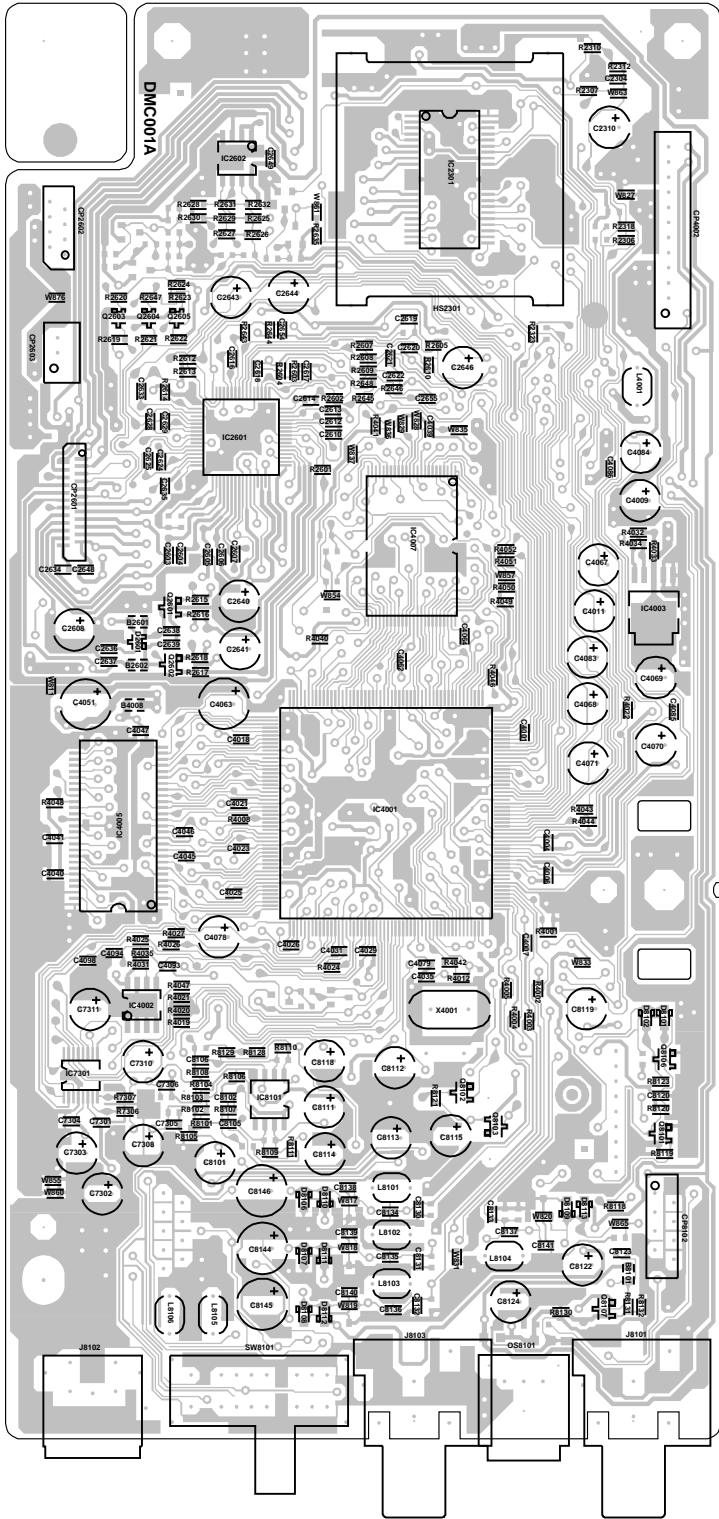
Ref. No.	Part No.	Description	Remarks
Q2604	T27T030180	FET 2SK3018	
Q2605	T27T030180	FET 2SK3018	
Q3001	2700690	PHOTO COUPLER RPI-303	
Q3002	2700690	PHOTO COUPLER RPI-303	
Q3003	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146	
Q3004	2700680	PHOTO COUPLER RPI-352C40N	
Q3005	2700680	PHOTO COUPLER RPI-352C40N	
Q3006	0000M00390	PHOTO TRANSISTOR ST-304L	
Q3007	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q3008	0000M00390	PHOTO TRANSISTOR ST-304L	
Q8003	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q8004	TAATA12660	TRANSISTOR, SILICON KTA1266-AT(Y, GR)	
Q8005	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q8006	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q8007	TPYJC05001	COMPOUND TRANSISTOR DTA124EKAT146	
Q8101	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q8102	TNYJC05001	COMPOUND TRANSISTOR DTC124EKAT146	
Q8103	TPYJA05001	COMPOUND TRANSISTOR DTA143EKAT146	
Q8104	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q8105	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
Q8106	TNYJD05001	COMPOUND TRANSISTOR DTC144EKAT146	
Q8107	TCAA3875SY	TRANSISTOR, SILICON KTC3875S_Y_RTK	
		COILS & TRANSFORMERS	
L101	031626009R	COIL, BIAS OSC 1626009	
L102	02167F101J	COIL 100 UH	
L103	0216A65R6K	COIL 5.6 UH	
L105	02167F101J	COIL 100 UH	
L106	02167F220J	COIL 22 UH	
L107	02167F220J	COIL 22 UH	
L301	02167F220J	COIL 22 UH	
L501	029T000107	COIL, LINE FILTER 0R4A223F20	⚠
L502	02AHB0A0A4	CORE, FERRITE W5T_20*10*10A	
L505	02167F220J	COIL 22 UH	
L506	02167E220K	COIL R9 22 UH	⚠
L701	02167F220J	COIL 22 UH	
L702	02167F220J	COIL 22 UH	
L703	02167F101J	COIL 100 UH	
L704	0216A6100K	COIL 10 UH	
L3002	021W7A220K	COIL 22 UH	
L3003	0216A6120K	COIL 12 UH	
L4001	02167F2R2J	COIL 2.2 UH	
L8004	0216A6470K	COIL 47 UH	
L8008	0216A6470K	COIL 47 UH	
L8101	02167F1R0K	COIL 1 UH	
L8102	02167F1R0K	COIL 1 UH	
L8103	02167F1R0K	COIL 1 UH	
L8104	02167F1R0K	COIL 1 UH	
L8105	02167FR33K	COIL 0.33 UH	
L8106	02167FR33K	COIL 0.33 UH	
T501	481260074	TRANSFORMER, SWITCHING 81260074	⚠

Ref. No.	Part No.	Description	Remarks
		JACKS	
J8001	060J411031	RCA JACK MSP-213V1-432 NI LF	
J8002	060J431020	RCA JACK MSP-213V2-432 NI LF	
J8003	060J401097	RCA JACK MSP-281V41-B	
J8004	060J401097	RCA JACK MSP-281V41-B	
J8005	060J421038	RCA JACK MSP-281V30-A	
J8101	060J411033	RCA JACK MSP-213V1-732 NI LF	
J8102	063D700005	JACK MDC-070V	
J8103	060J411032	RCA JACK MSP-213V1-652 NI LF	
		SWITCHES	
SW651	0504101T34	SWITCH, TACT EVQ21505R	
SW652	0504101T34	SWITCH, TACT EVQ21505R	
SW653	0504101T34	SWITCH, TACT EVQ21505R	
SW654	0504101T34	SWITCH, TACT EVQ21505R	
SW655	0504101T34	SWITCH, TACT EVQ21505R	
SW685	0504R01T38	SWITCH, TACT EVQ11L05R	
SW686	0504R01T38	SWITCH, TACT EVQ11L05R	
SW687	0504R01T38	SWITCH, TACT EVQ11L05R	
SW688	0504R01T38	SWITCH, TACT EVQ11L05R	
SW689	0504R01T38	SWITCH, TACT EVQ11L05R	
SW690	0504R01T38	SWITCH, TACT EVQ11L05R	
SW3001	0508S11001	SWITCH (LEAF) LSA-1144EAU	
SW8101	0510Y24001	SWITCH SLIDE SK42H0IG9A	
		P.C.BOARD ASSEMBLIES	
PCB010	A2C518H010	PCB ASS'Y DMC002A	
PCB130	A2C518H130	PCB ASS'Y DMC001A	
PCB270	A2C518H270	PCB ASS'Y DEC001A	
		MISCELLANEOUS	
B501	024HT03563	CORE, BEADS W4BRH3.5X6X1.0X2	
B502	024HT03553	CORE, BEADS W5RH3.5X5X1.0	
B2601	024HC31022	CORE, BEADS FCM2012H-102T04	
B2602	024HC31022	CORE, BEADS FCM2012H-102T04	
B2603	024HC31022	CORE, BEADS FCM2012H-102T04	
B2604	024HC31022	CORE, BEADS FCM2012H-102T04	
B2605	024HC31022	CORE, BEADS FCM2012H-102T04	
B4001	024HC31022	CORE, BEADS FCM2012H-102T04	
B4002	024HC31022	CORE, BEADS FCM2012H-102T04	
B4003	024HC31022	CORE, BEADS FCM2012H-102T04	
B4004	024HC31022	CORE, BEADS FCM2012H-102T04	
B4005	024HC31022	CORE, BEADS FCM2012H-102T04	
B4006	024HC31022	CORE, BEADS FCM2012H-102T04	
B4007	024HC31022	CORE, BEADS FCM2012H-102T04	
B4008	024HC31022	CORE, BEADS FCM2012H-102T04	
B7301	024HC31022	CORE, BEADS FCM2012H-102T04	
B7302	024HC31022	CORE, BEADS FCM2012H-102T04	
B8101	024HC31022	CORE, BEADS FCM2012H-102T04	
B8102	024HC31022	CORE, BEADS FCM2012H-102T04	

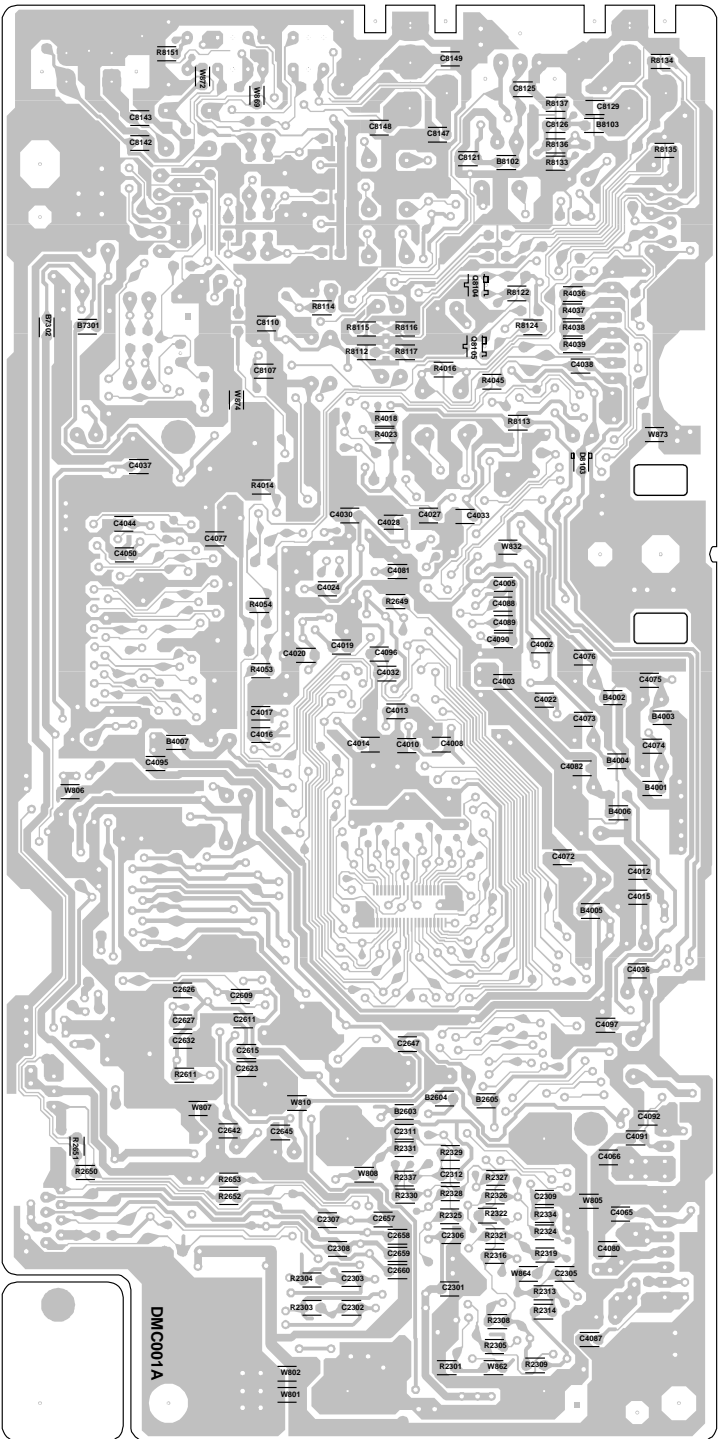
Ref. No.	Part No.	Description	Remarks
B8103	024HC31022	CORE, BEADS FCM2012H-102T04	
BT601	1411004015	BATTERY, MANGAN R03UPTT/2ST	
CD102	122H061504	CORD, JUMPER 2H061504	
CD501	1209419910	CORD, AC BUSH 9419910	
CD681	122H051202	CORD, JUMPER 2H051202	
CP101	697290620	CONNECTOR PCB SIDE TOC-C09X-A1	
CP102	069J760599	CONNECTOR PCB SIDE IMSA-9604S-06C	
CP103	067U002019	WIRE HOLDER B2013H02-2P	
CP501	06CH2C0302	CORD CONNECTOR CH2C0302	
CP506	067U010049	WIRE HOLDER B2013H02-10P	
CP509	067U010049	WIRE HOLDER B2013H02-10P	
CP651	069J750019	CONNECTOR PCB SIDE IMSA-9604S-05Z13	
CP681	069J750019	CONNECTOR PCB SIDE IMSA-9604S-05Z13	
CD8002	122F080601	CORD, JUMPER 2F080601	
CP2601	069GYOT079	CONNECTOR PCB SIDE 09-5000-024-001-006	
CP2602	069EV83010	CONNECTOR PCB SIDE 00_6232_008_006_800	
CP2603	069S230629	CONNECTOR PCB SIDE A2001WV2-3P	
CP3001	06972C0010	CONNECTOR PCB SIDE TMC-J12P-B2	
CP4002	069S2C0629	CONNECTOR PCB SIDE A2001WV2-12P	
CP6002	06CPL02006	CABLE CPL02006	
CP8002	069J780599	CONNECTOR PCB SIDE IMSA-9604S-08C	
CP8102	069J780599	CONNECTOR PCB SIDE IMSA-9604S-08C	
F501	081PC2R505	FUSE 51MS025L	
FH501	06710T0006	HOLDER, FUSE EYF-52BC	
FH502	06710T0006	HOLDER, FUSE EYF-52BC	
ICP501	0835C01004	MICRO FUSE 20N_1000FS-RT	
ICP502	0835C01604	MICRO FUSE 20N_1600FS-RT	
OS651	077Q037011	REMOTE RECEIVER PIC-37042L0-H	
OS8101	07AQ000009	OPTICAL DEVICE OFTG038101	
TM601	076N0HR010	TRANSMITTER RC-HR or	
	076R0HR010	TRANSMITTER R25-2008	
TU301	162300038	RF UNIT 115-V-H015ARE	
V651	0040F54009	LED DISPLAY ELF-4M6SDRVGWB/S423	
X101	100DT3R528	CRYSTAL HC-49/U	
X3001	100BT01004	CRYSTAL HC-49U/S	
X4001	100BT02701	CRYSTAL HC-49U/S	

24. Schematic Diagram for printing with A4

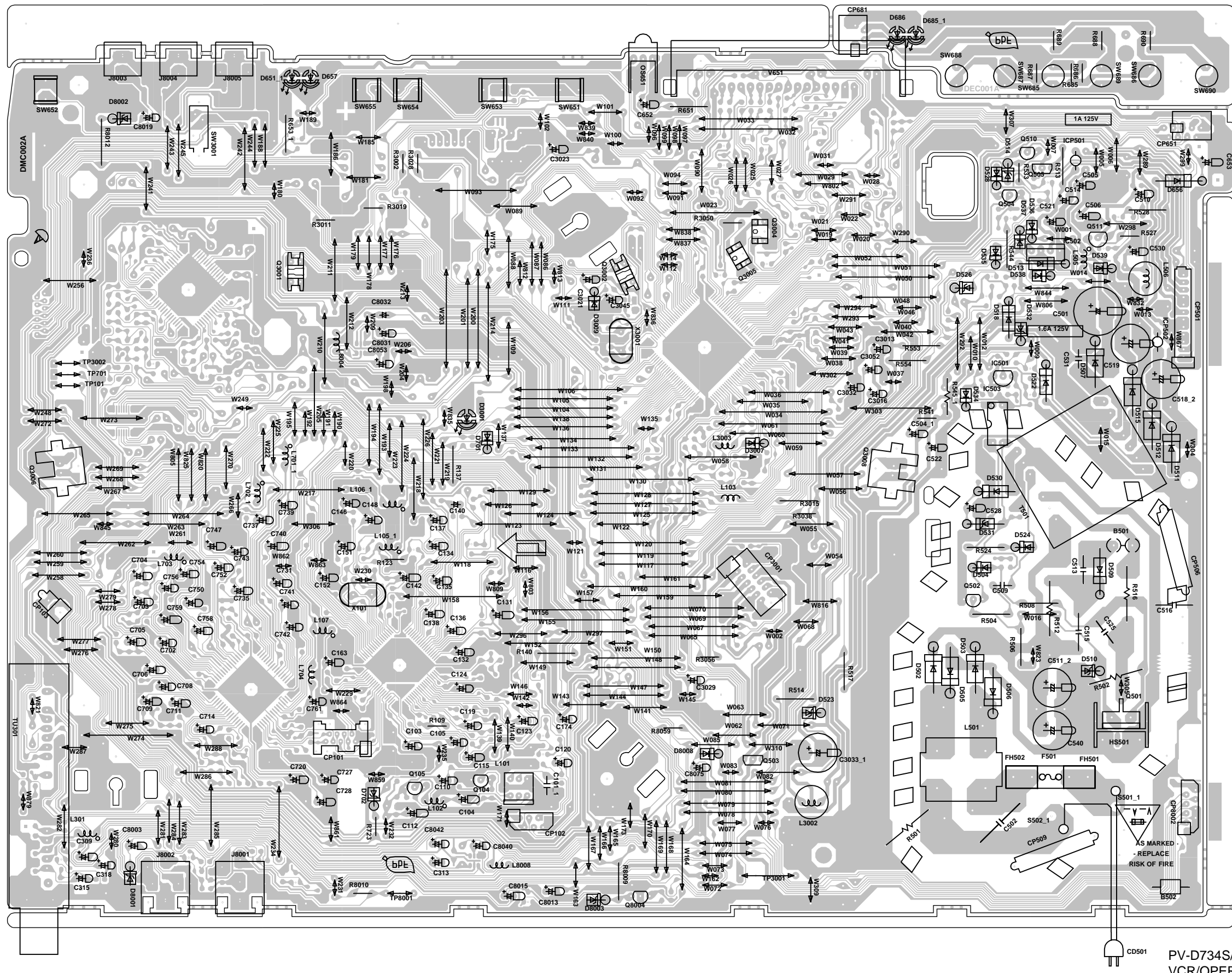
DVD (TOP SIDE)

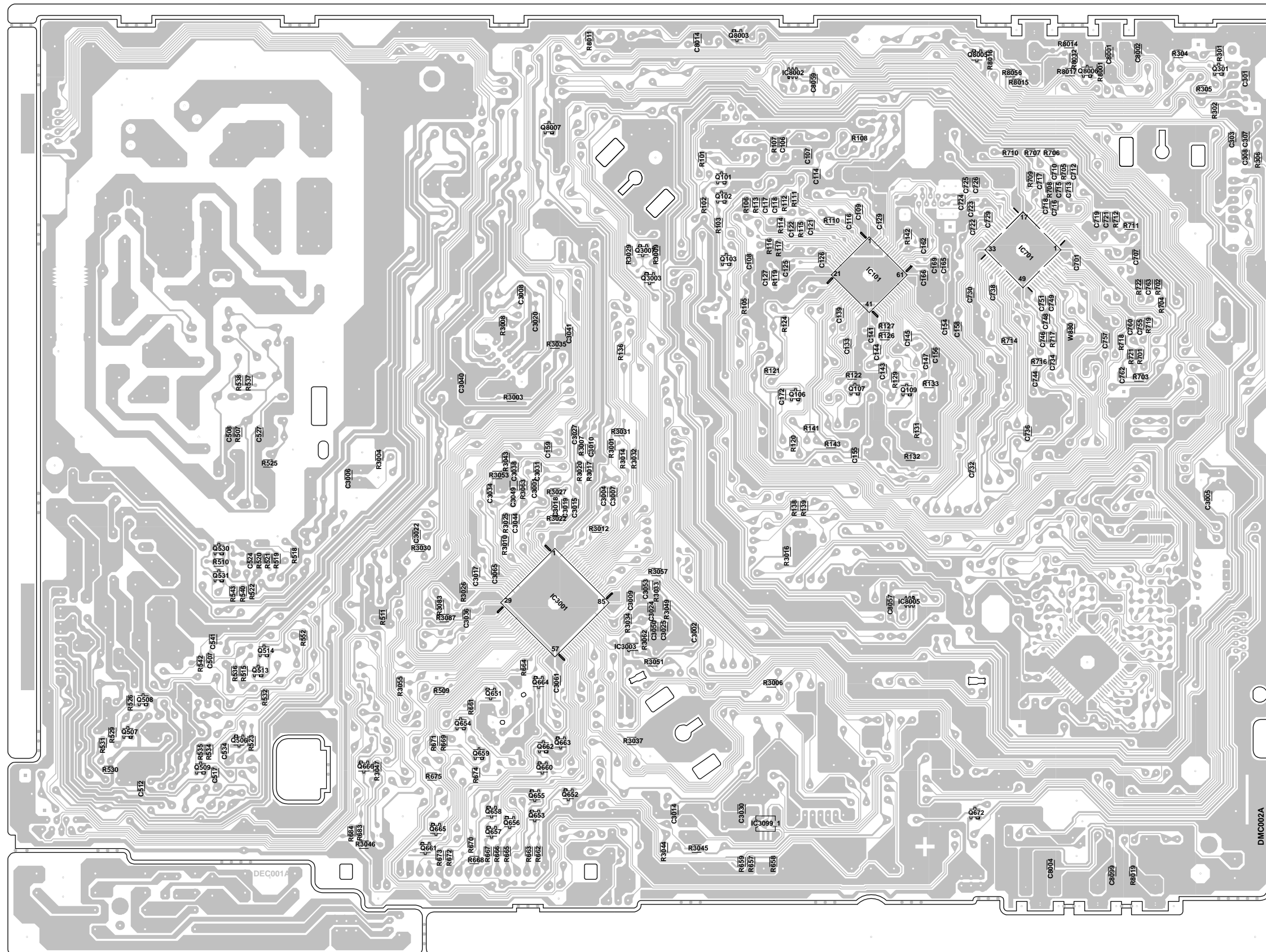


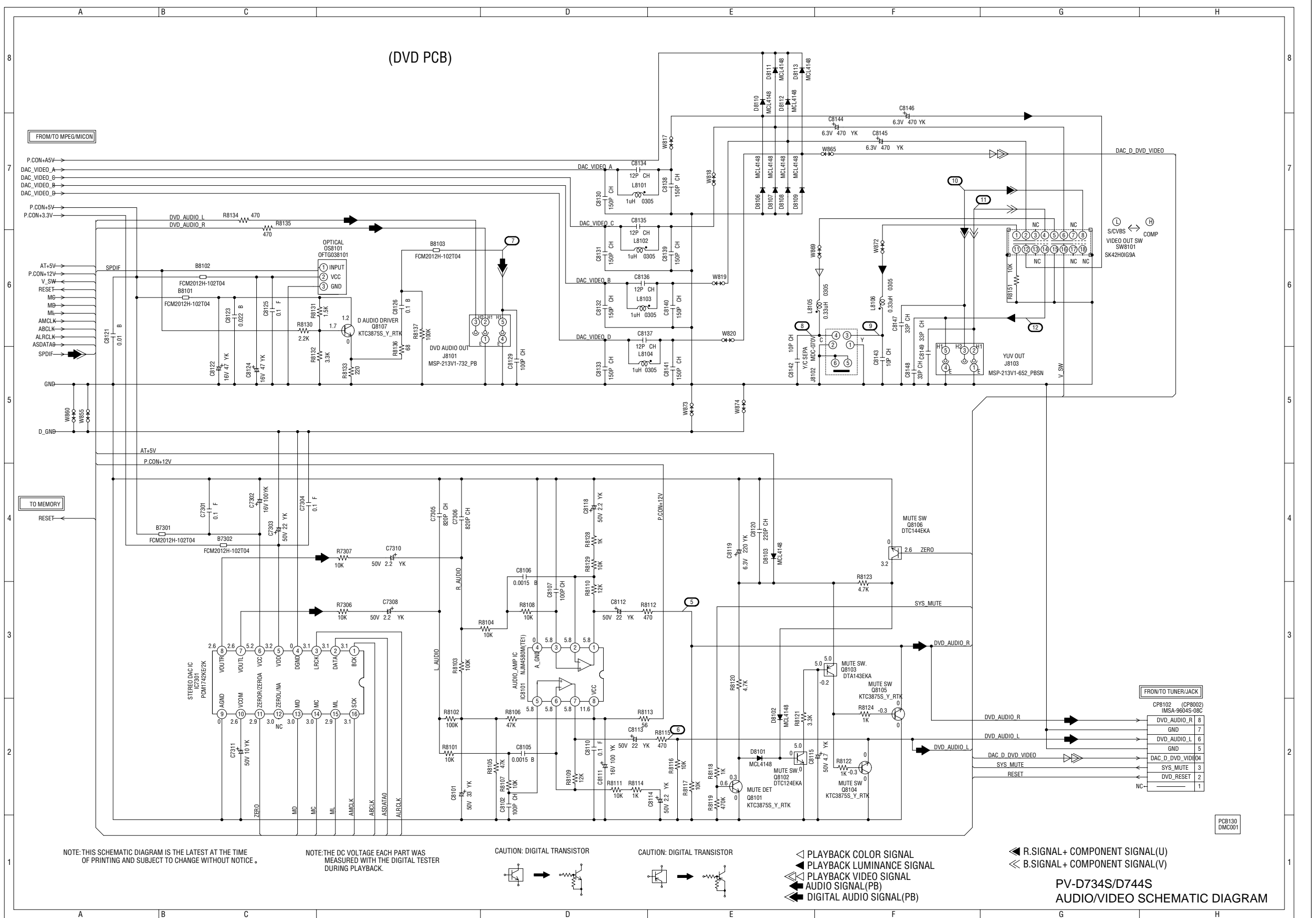
DVD (BOTTOM SIDE)

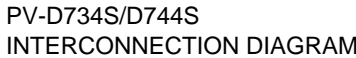


SOLDER SIDE

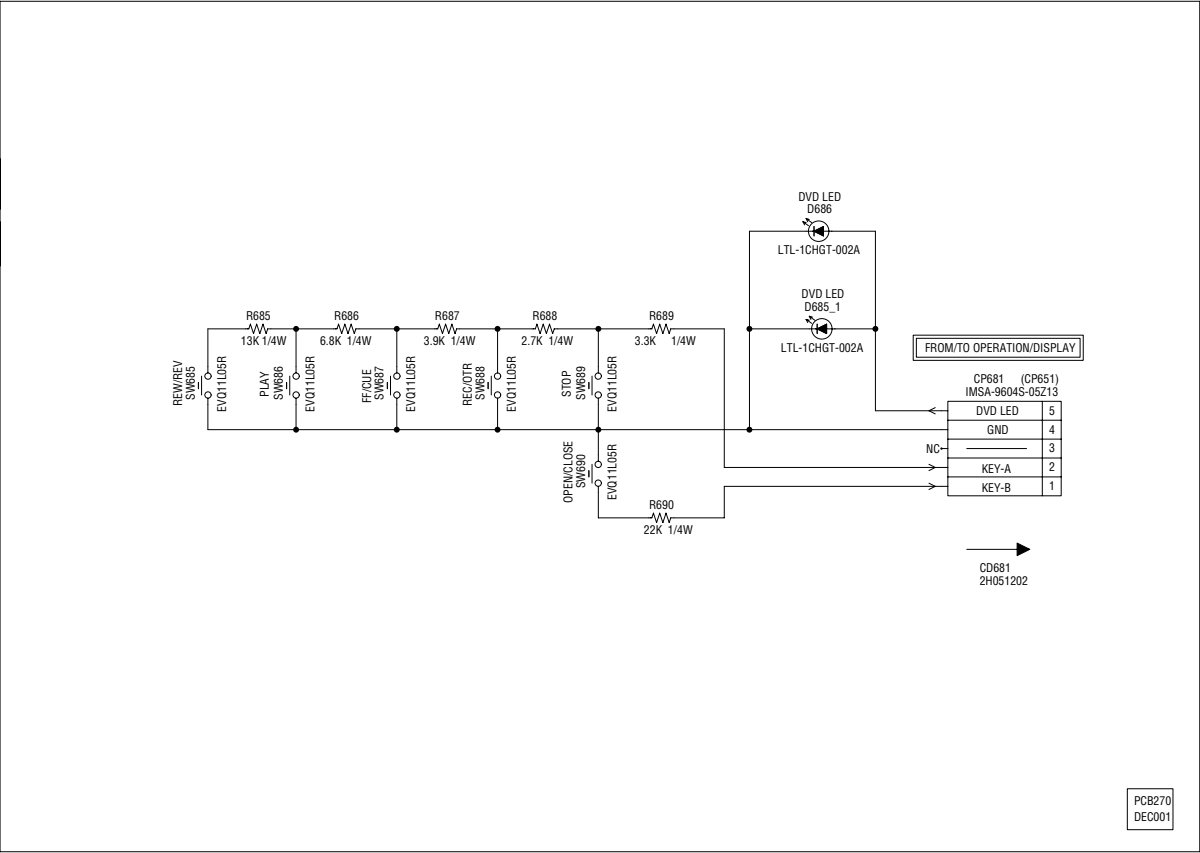


SOLDER SIDE





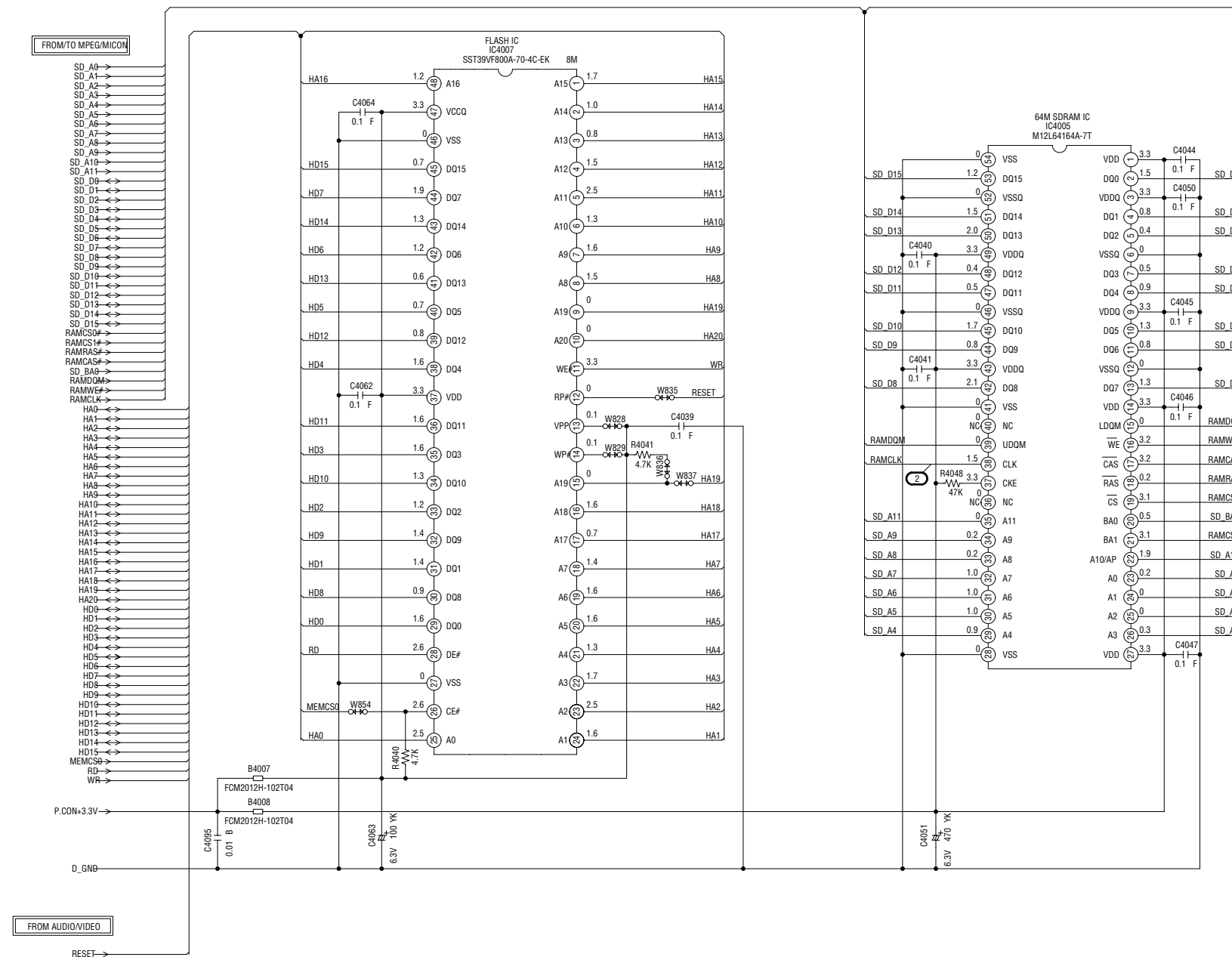
(OPERATION PCB)



NOTE:THE DC VOLTAGE EACH PART WAS
MEASURED WITH THE DIGITAL TESTER
DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME
OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE .

(DVD PCB)



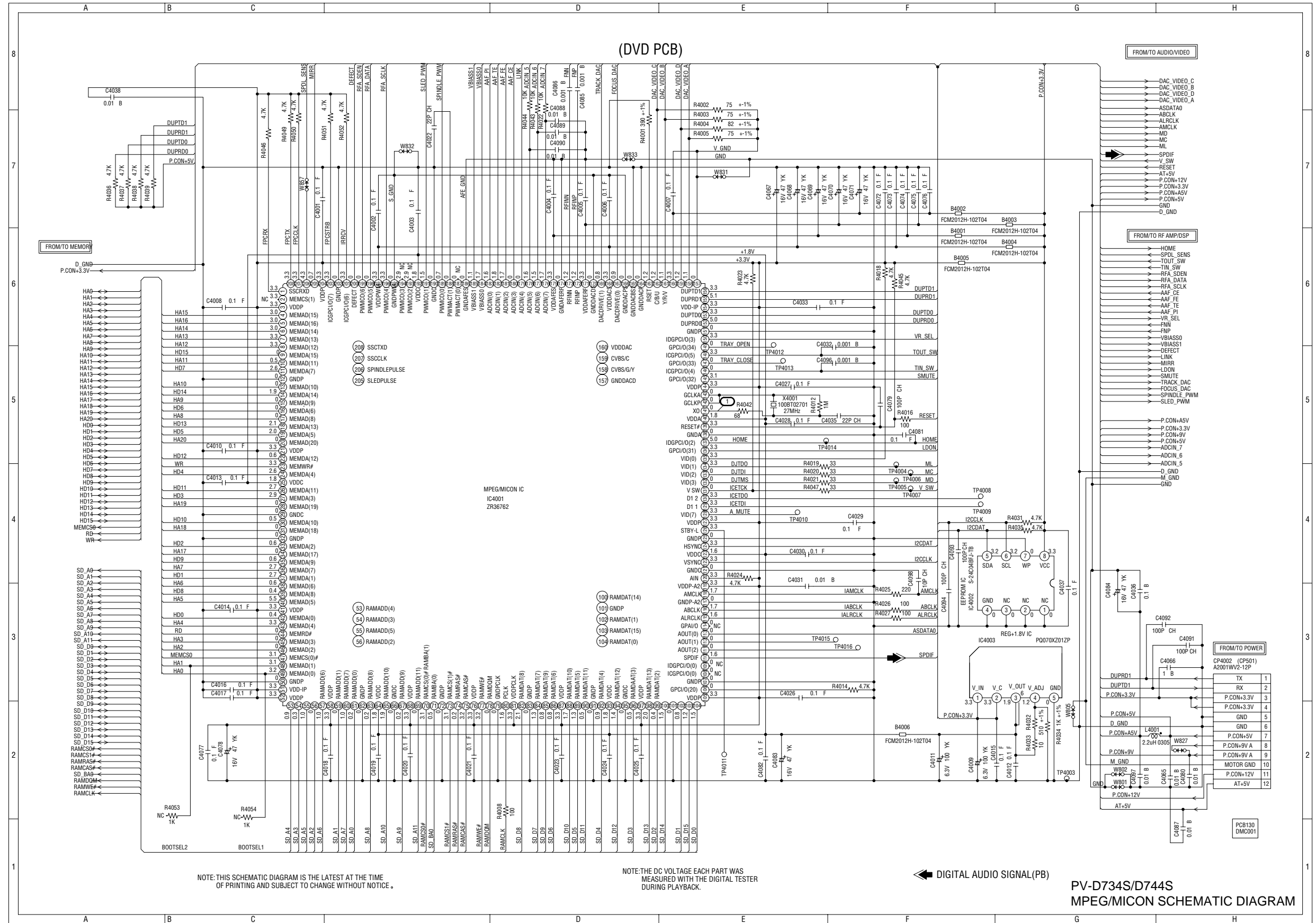
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

PV-D734S/D744S
MEMORY SCHEMATIC DIAGRAM

PCB130
DMC001

(DVD PCB)



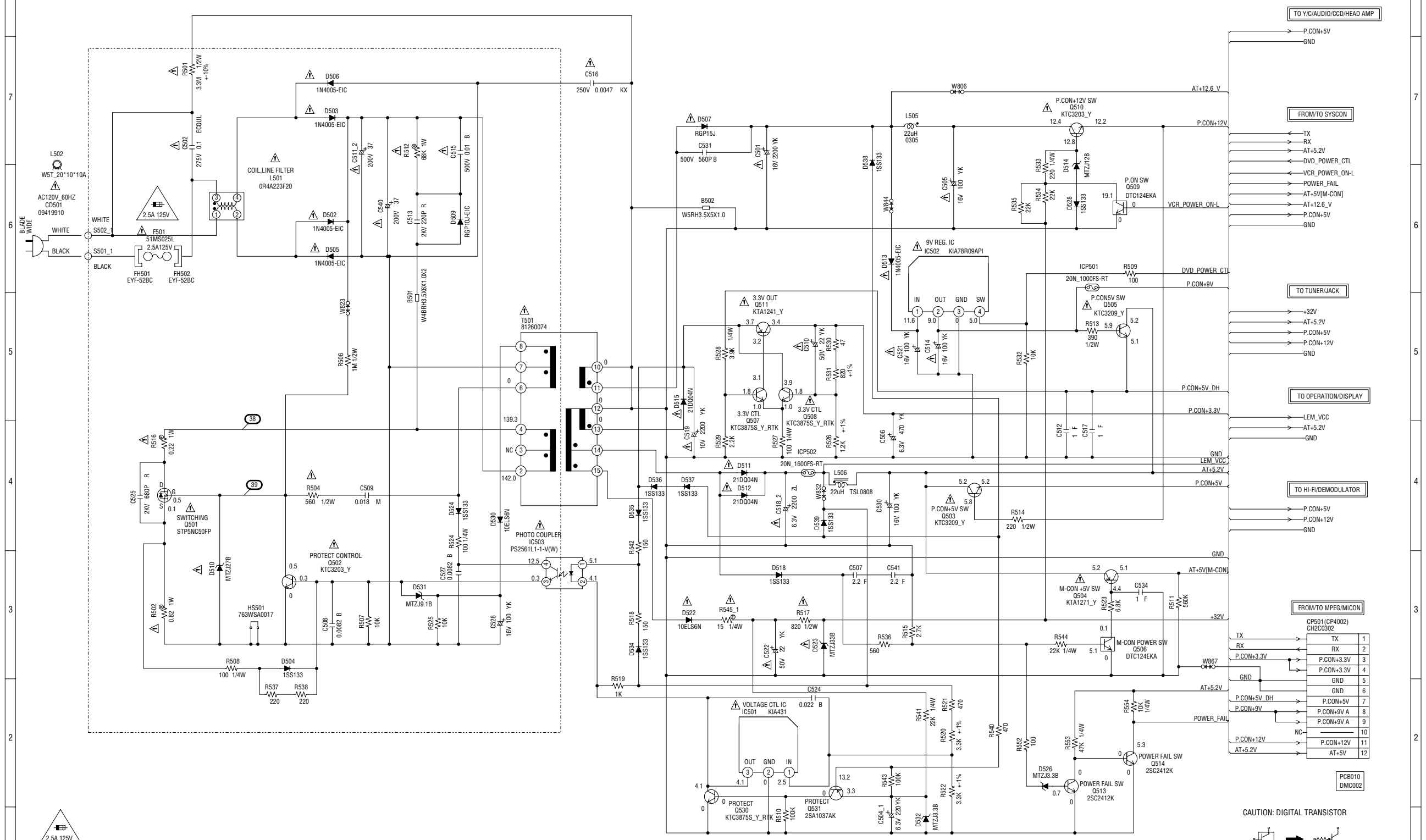
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

◀ DIGITAL AUDIO SIGNAL (PB)


PV-D734S/D744S
MPEG/MICON SCHEMATIC DIAGRAM

(VCR PCB)



CAUTION :FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE 2.5A 125V(F501)

ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE
N'UTILISER QUE DES FUSIBLE DE MEME TYPE 2.5A 125V(F501).

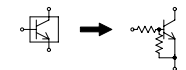
CAUTION SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY .

ATTENTION: LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

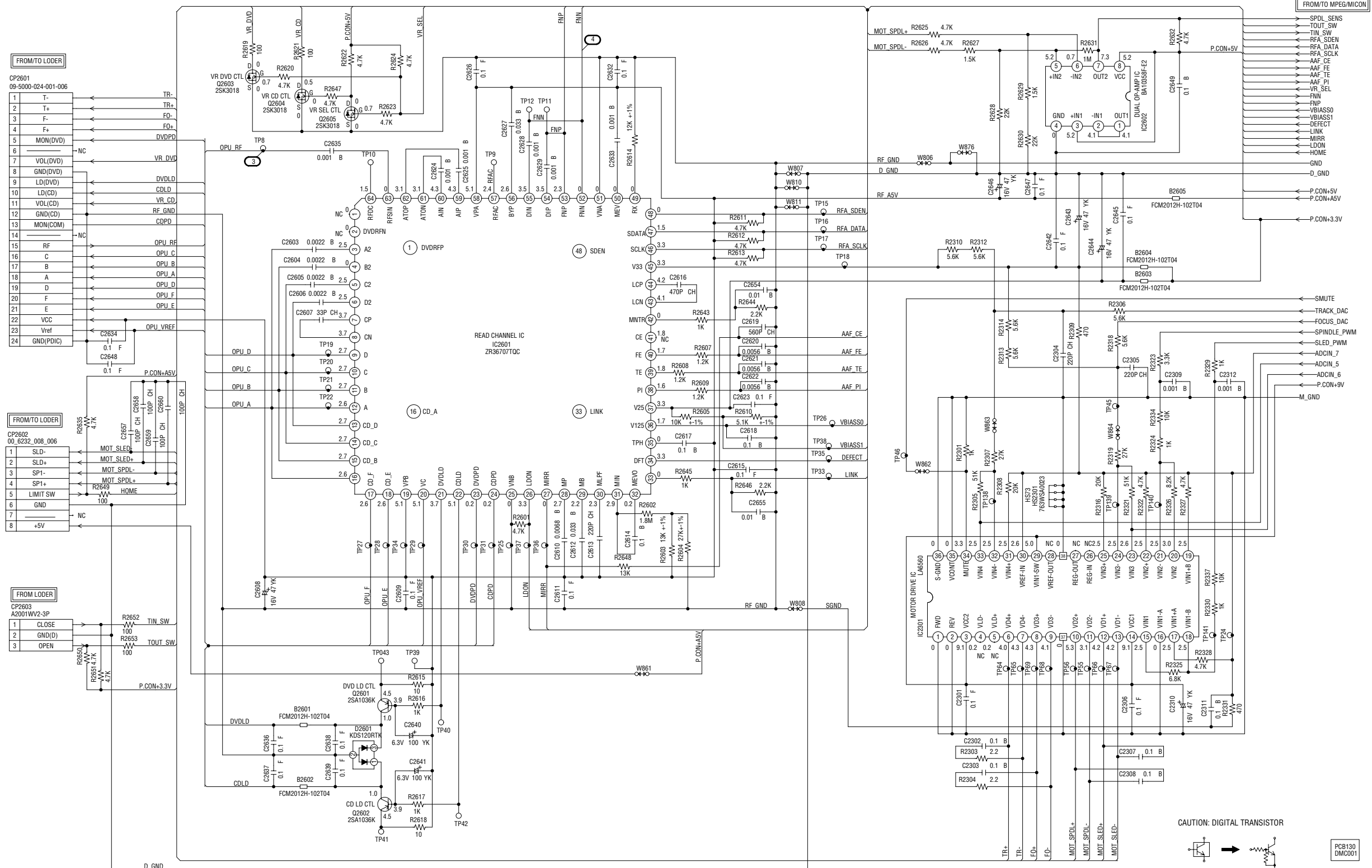
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

CAUTION: DIGITAL TRANSISTOR

PV-D734S/D744S
POWER SCHEMATIC DIAGRAM

(DVD PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

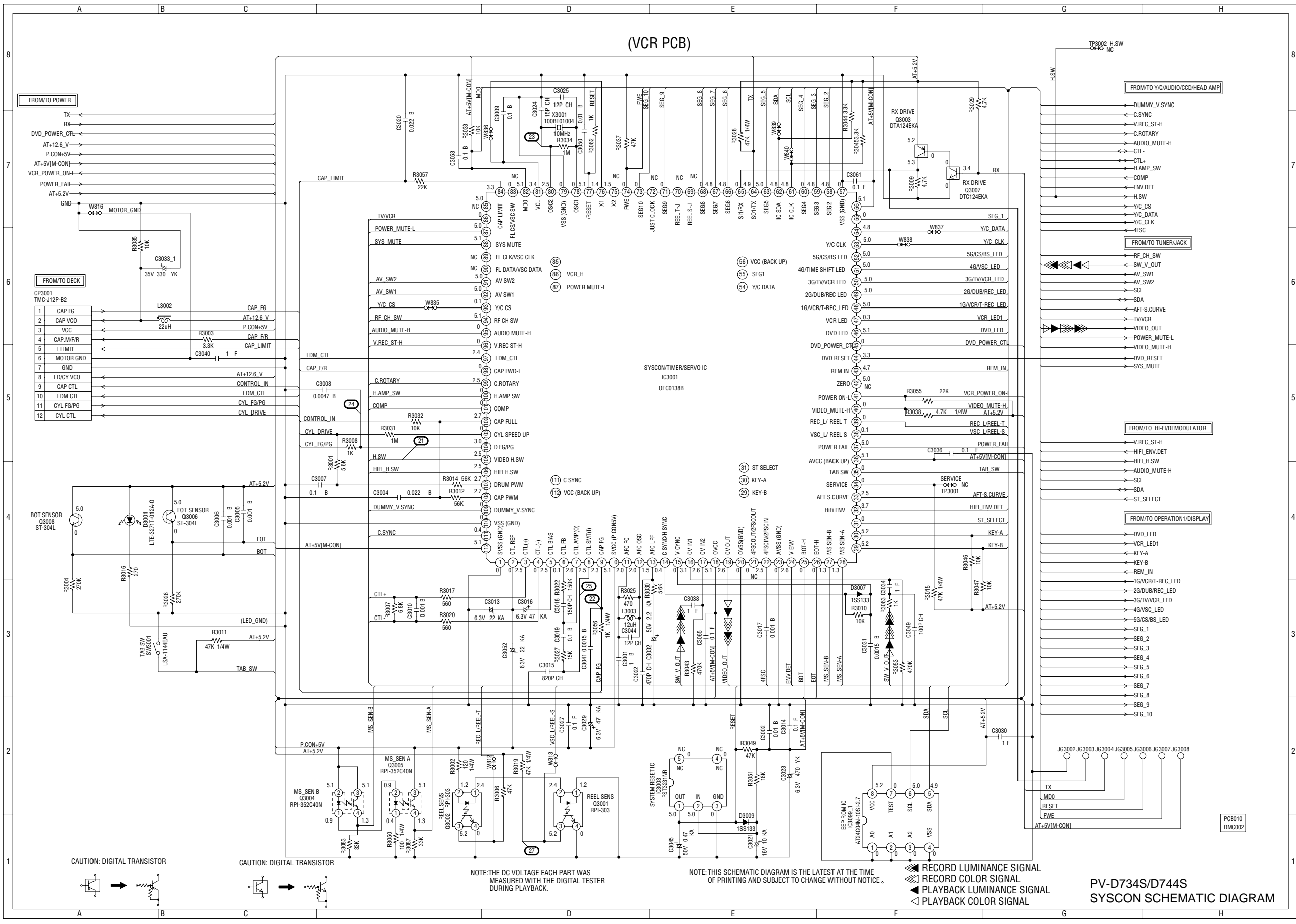
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

ATTENTION: LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AU POINT DE VUE SÉCURITÉ, N'UTILISER QUE CELLES DÉCRITES DANS LA NOMÉNCLATURE DES PIÈCES.

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

PV-D734S/D744S
RF AMP/DSP SCHEMATIC DIAGRAM

(VCR PCB)



CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

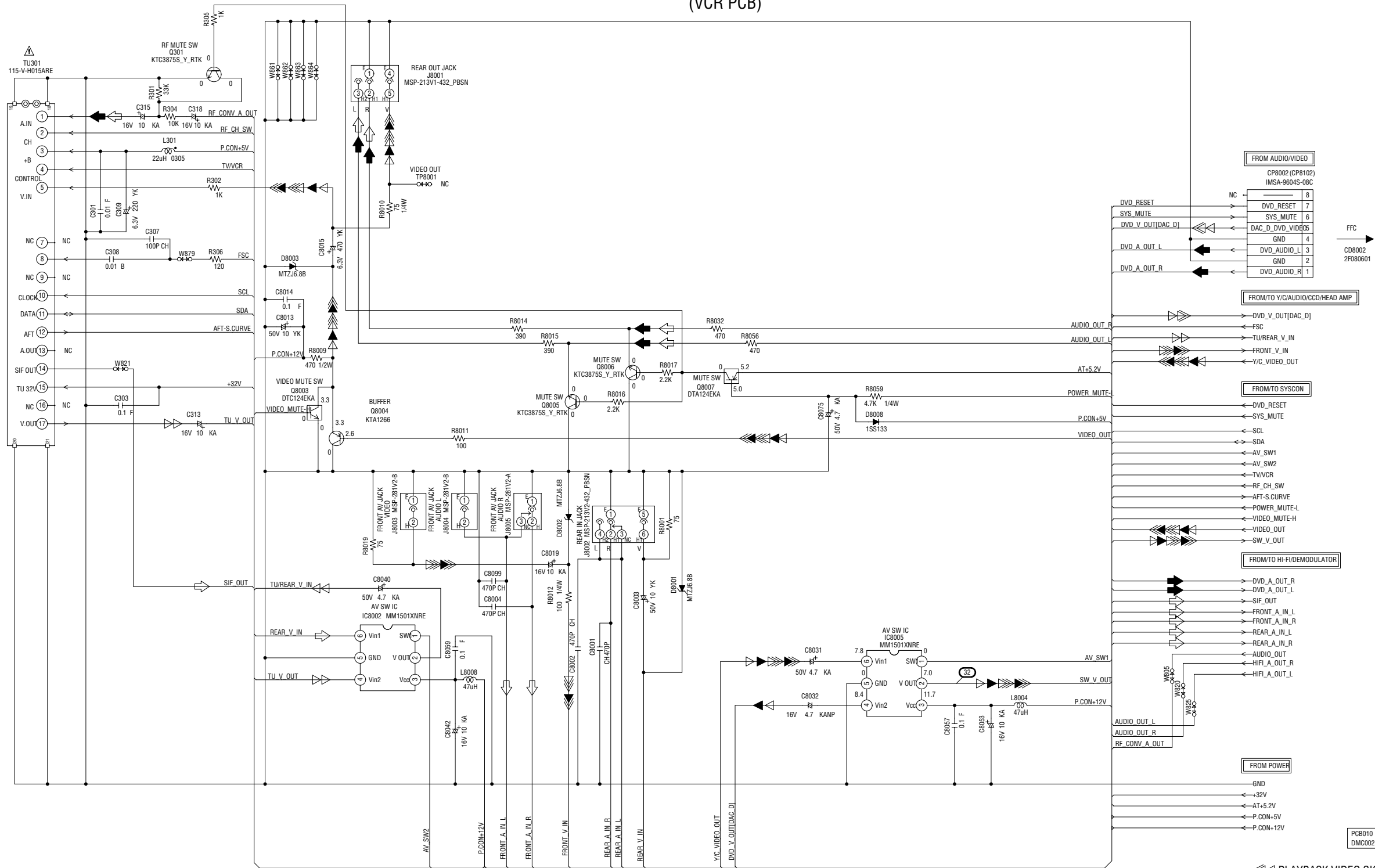
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

- RECORD LUMINANCE SIGNAL
- RECORD COLOR SIGNAL
- PLAYBACK LUMINANCE SIGNAL
- PLAYBACK COLOR SIGNAL

PV-D734S/D744S
SYSCON SCHEMATIC DIAGRAM

(VCR PCB)



CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

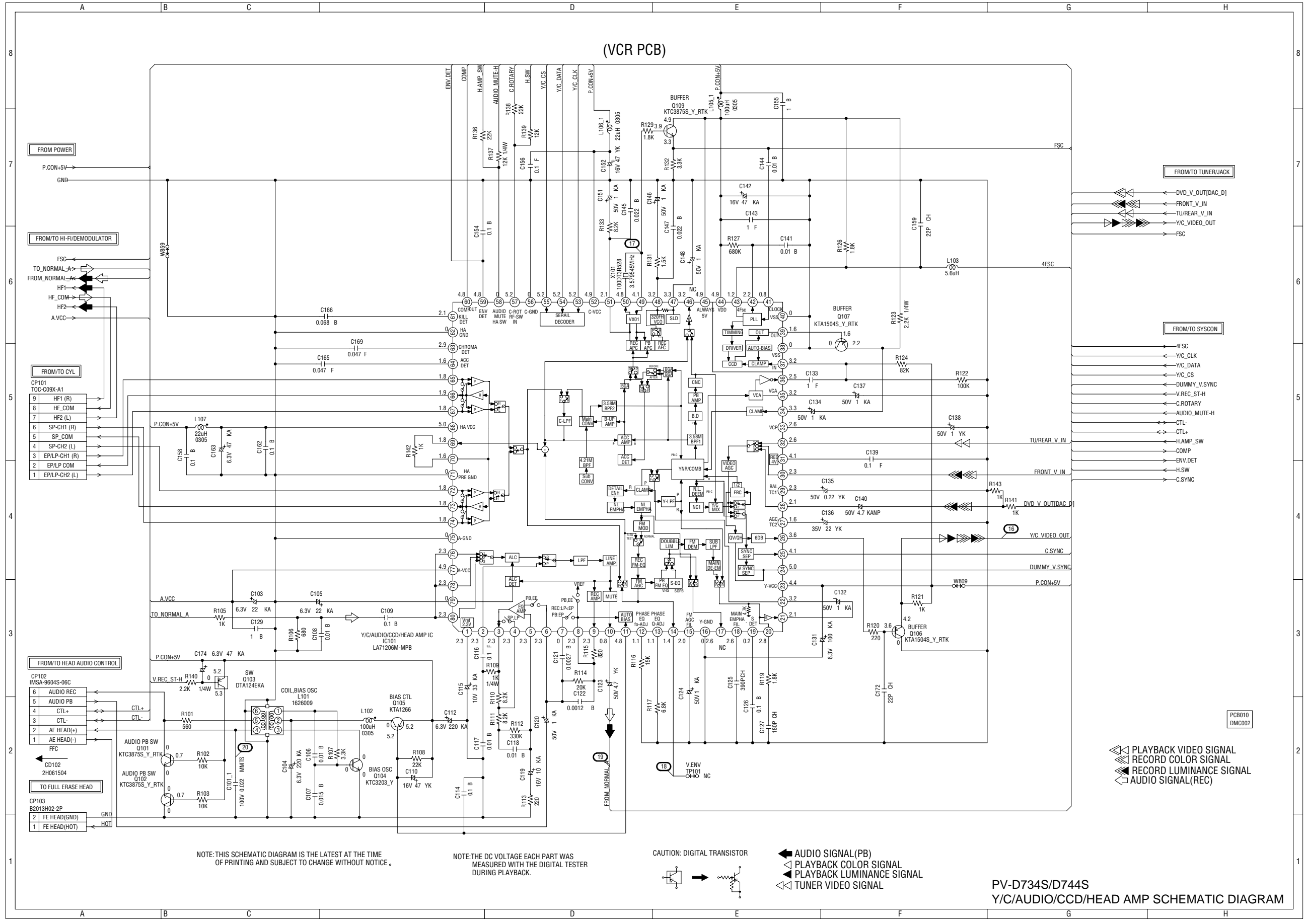
CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION: LES PIÈCES RÉPARÉES PAR UN ÉTANT DANGEREUSES AN POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

- RECORD COLOR SIGNAL
- RECORD LUMINANCE SIGNAL
- AUDIO SIGNAL (REC)
- AUDIO SIGNAL (PB)
- DIGITAL AUDIO SIGNAL (PB)
- PLAYBACK VIDEO SIGNAL
- TUNER VIDEO SIGNAL
- PLAYBACK LUMINANCE SIGNAL
- PLAYBACK COLOR SIGNAL

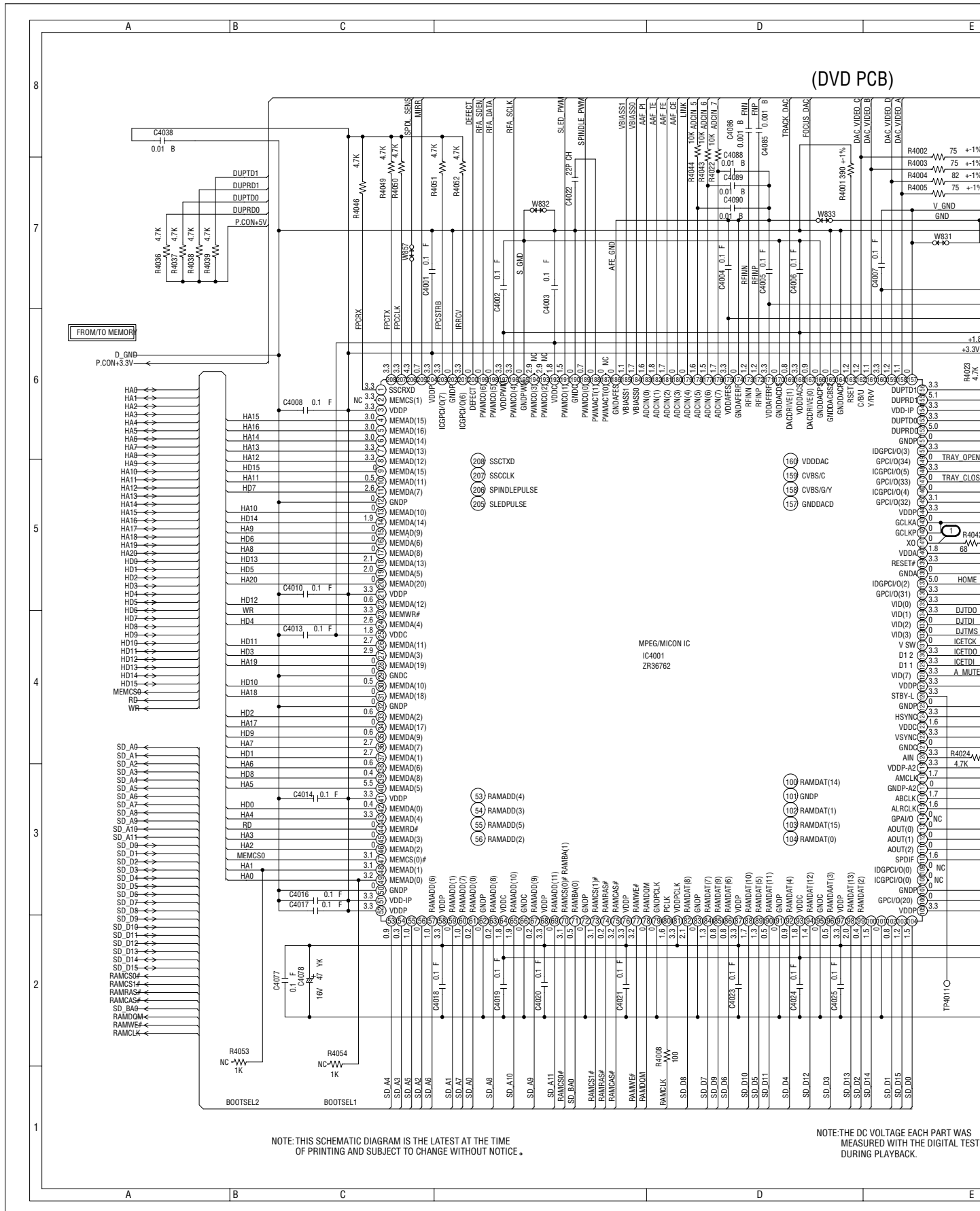
PV-D734S/D744S
TUNER/JACK SCHEMATIC DIAGRAM

(VCR PCB)



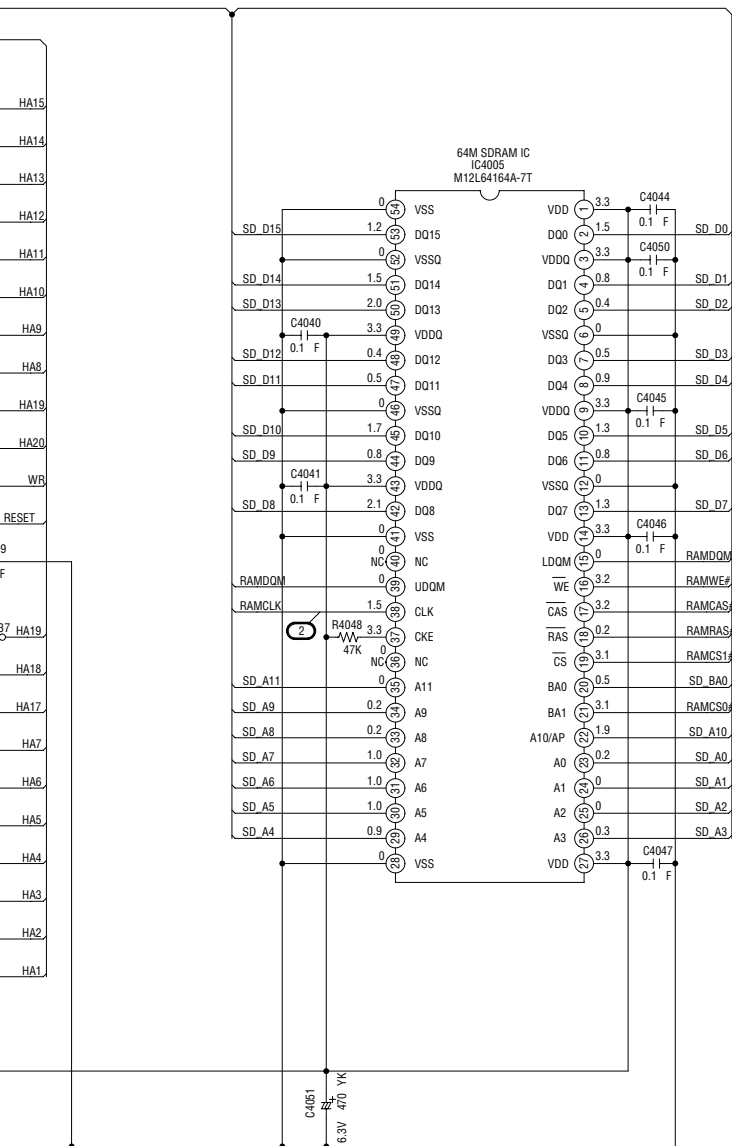
20 SCHEMATIC DIAGRAMS

20.1. MPEG/MICON SCHEMATIC DIAGRAM





CB)



NOTE:THE DC VOLTAGE EACH PART WAS
MEASURED WITH THE DIGITAL TESTER
DURING PLAYBACK.

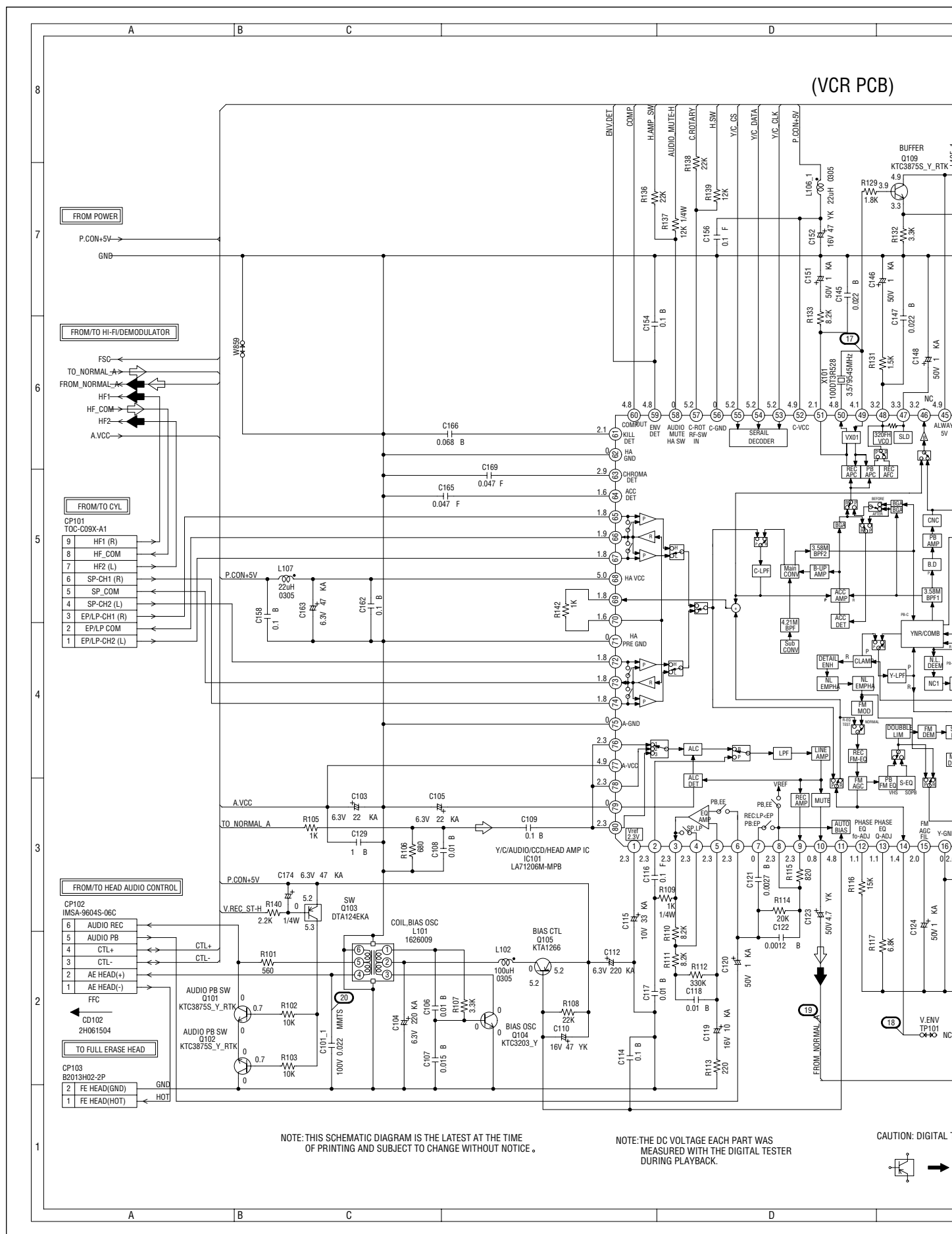
PV-D734S/D744S MEMORY SCHEMATIC DIAGRAM

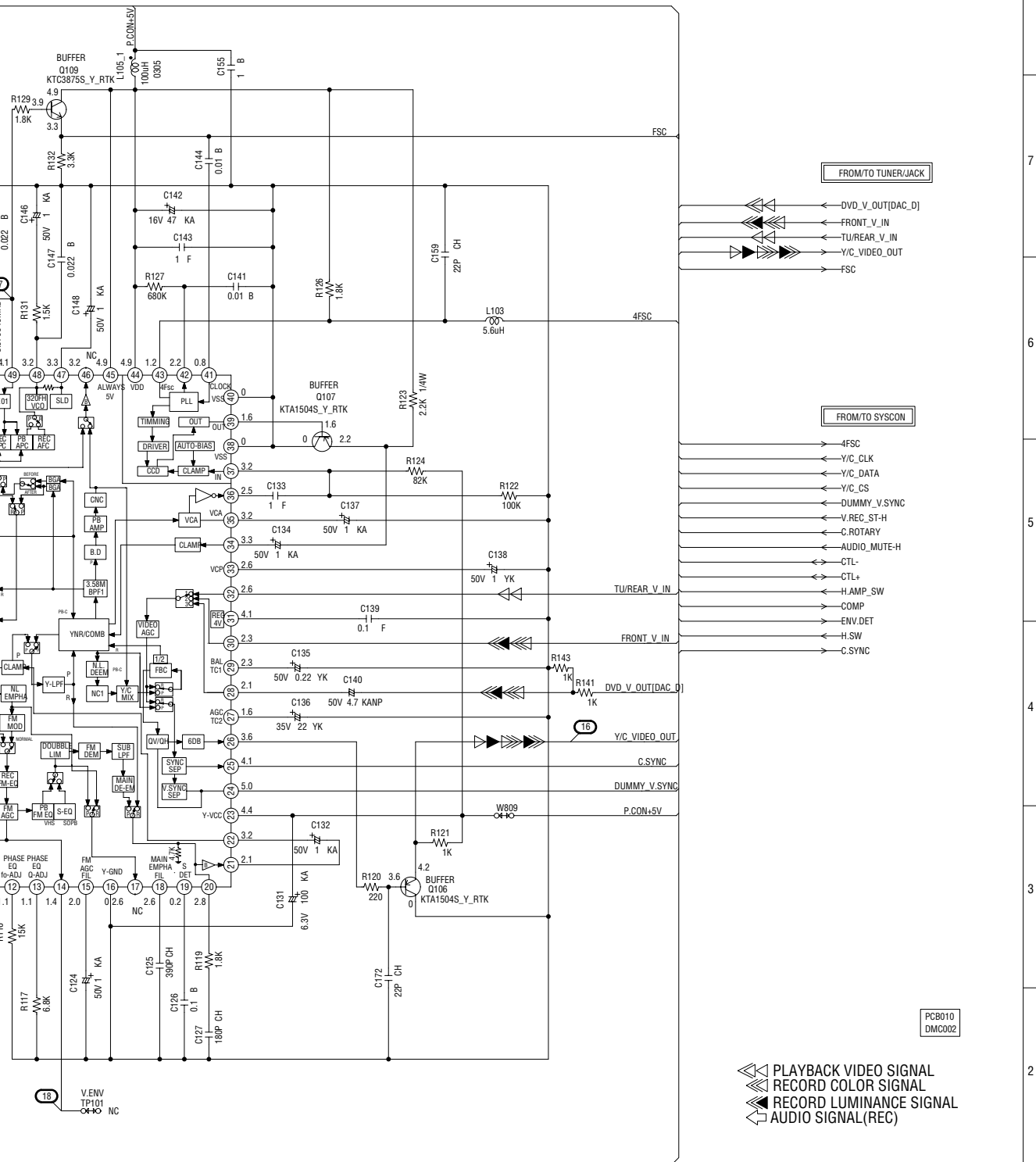
PCB130
DMC001



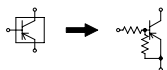


20.5. Y/C/AUDIO/CCD/HEAD AMP SCHEMATIC DIAGRAM





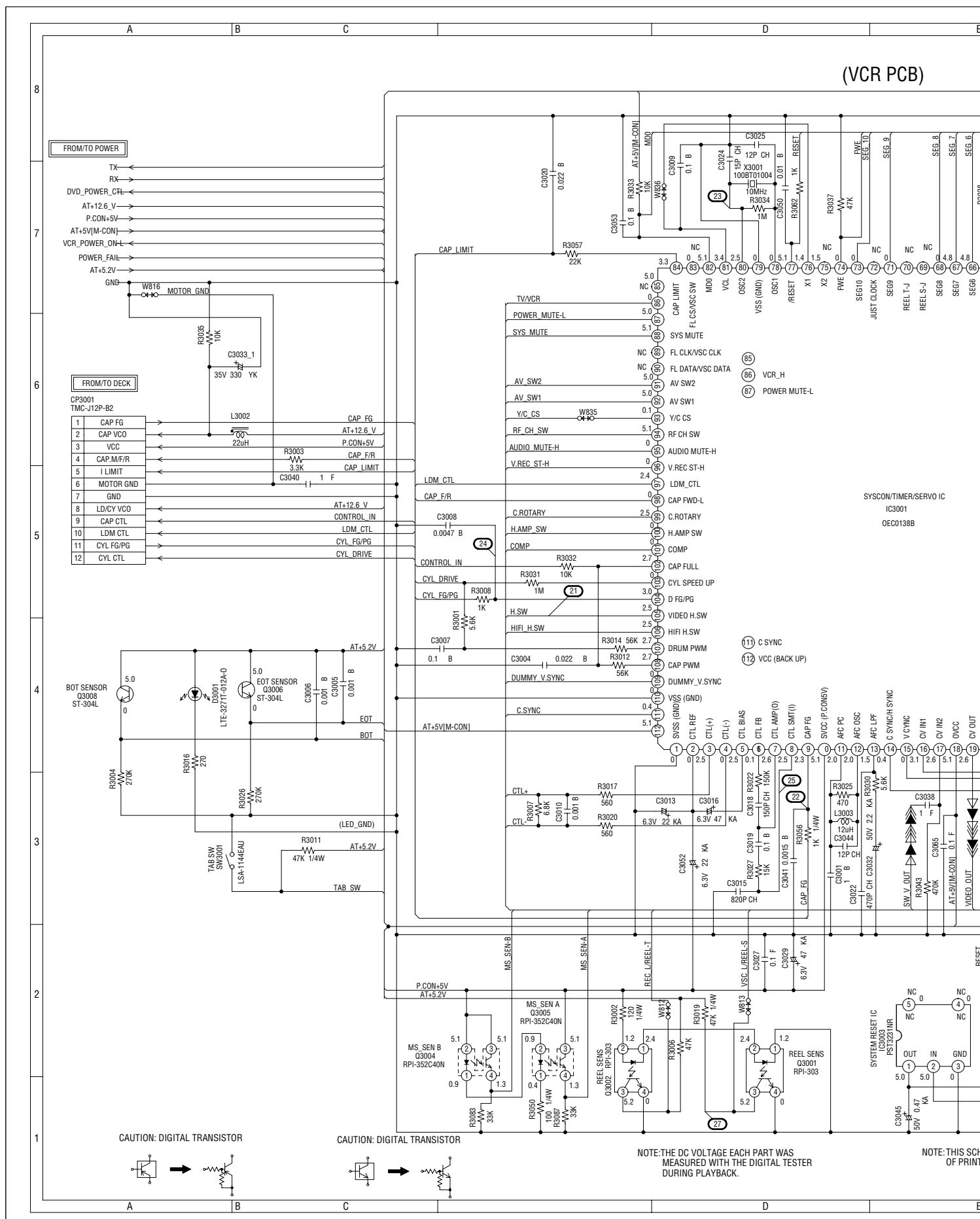
CAUTION: DIGITAL TRANSISTOR



-  AUDIO SIGNAL (PB)
 PLAYBACK COLOR SIGNAL
 PLAYBACK LUMINANCE SIGNAL
 TUNER VIDEO SIGNAL

PV-D734S/D744S
Y/C/AUDIO/CCD/HEAD AMP SCHEMATIC DIAGRAM

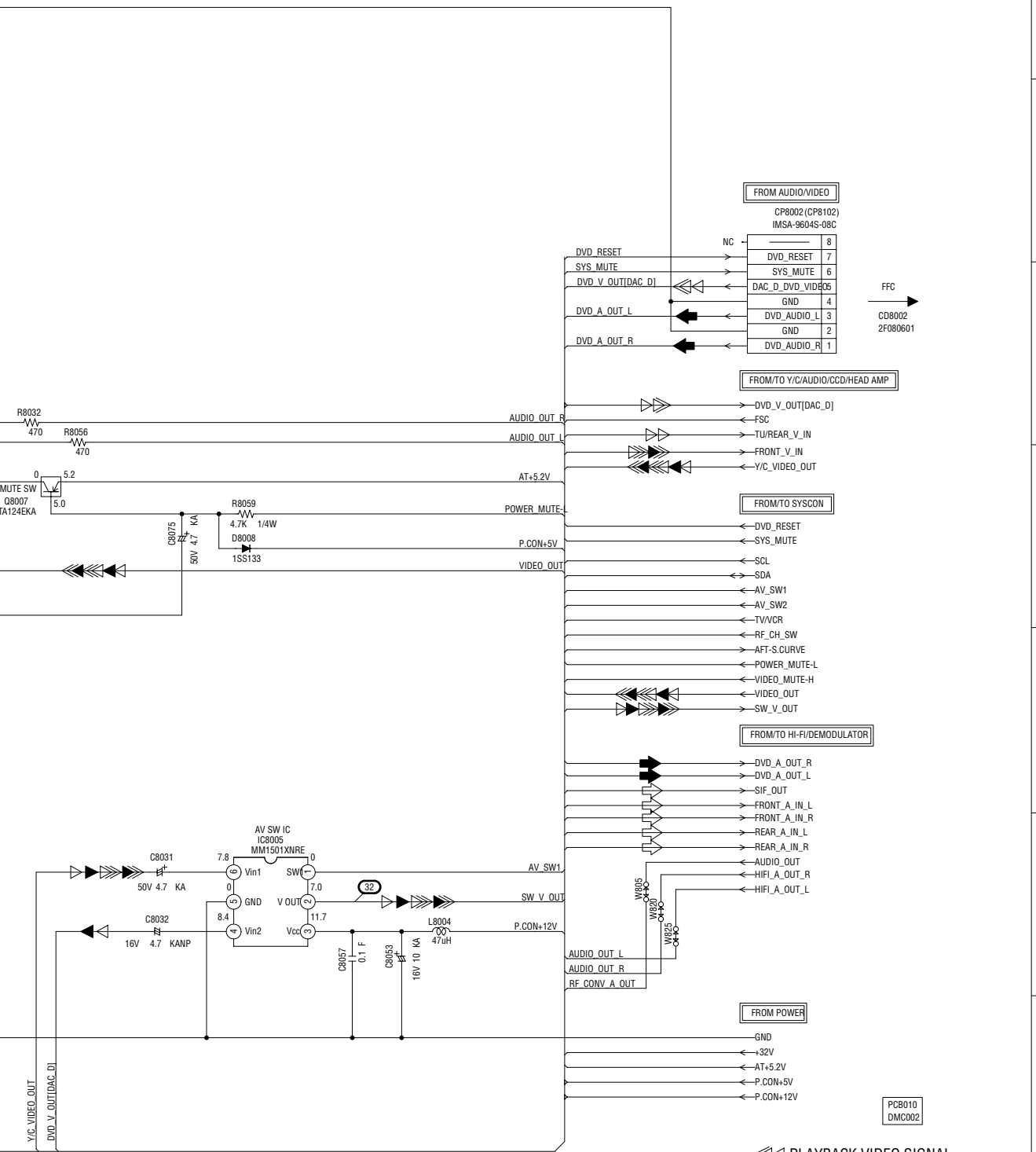
20.6. SYSCON SCHEMATIC DIAGRAM







VCR PCB)

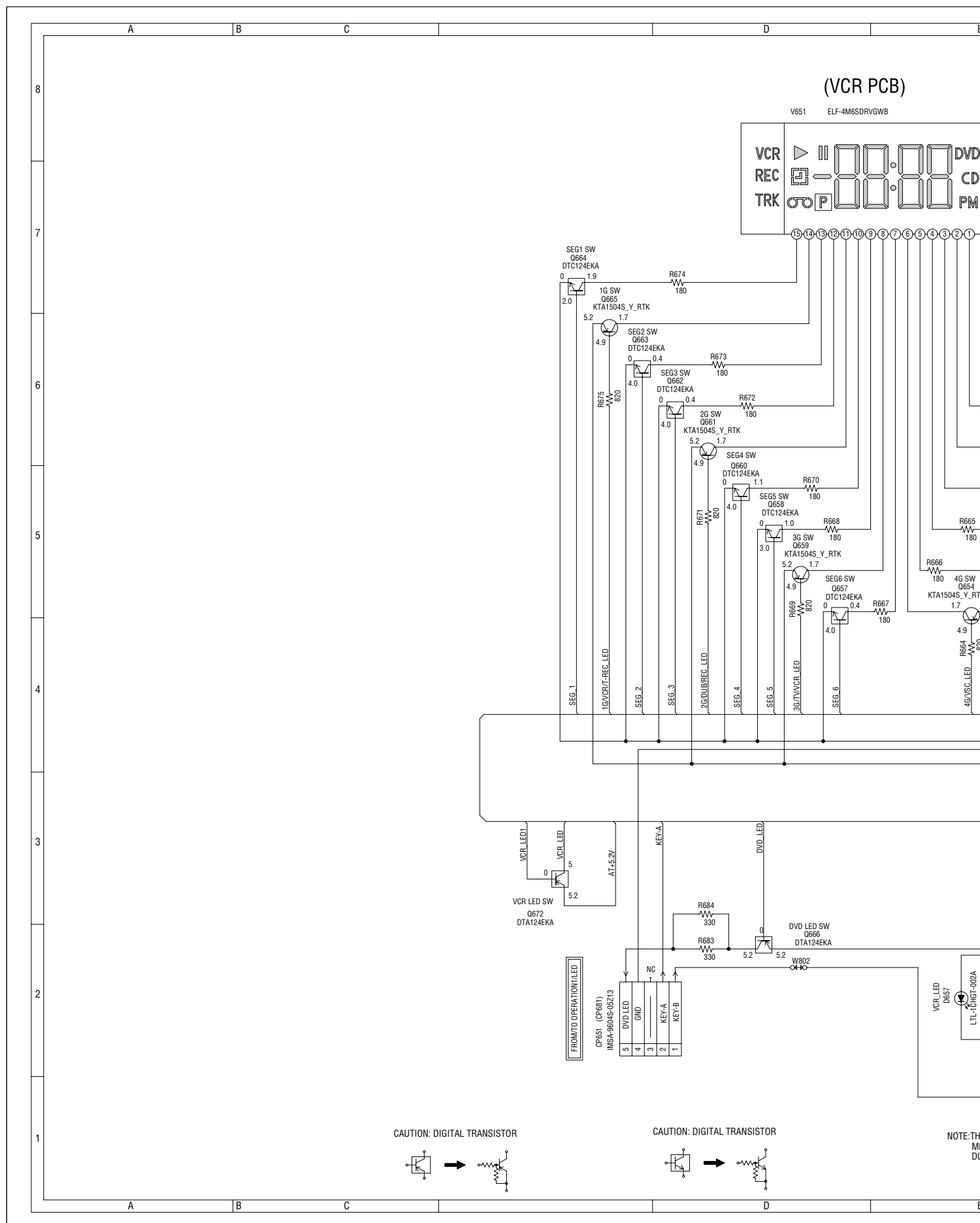


ARTS MARKED BY ARE
SAFETY, USE ONES
ARTS LIST ONLY .

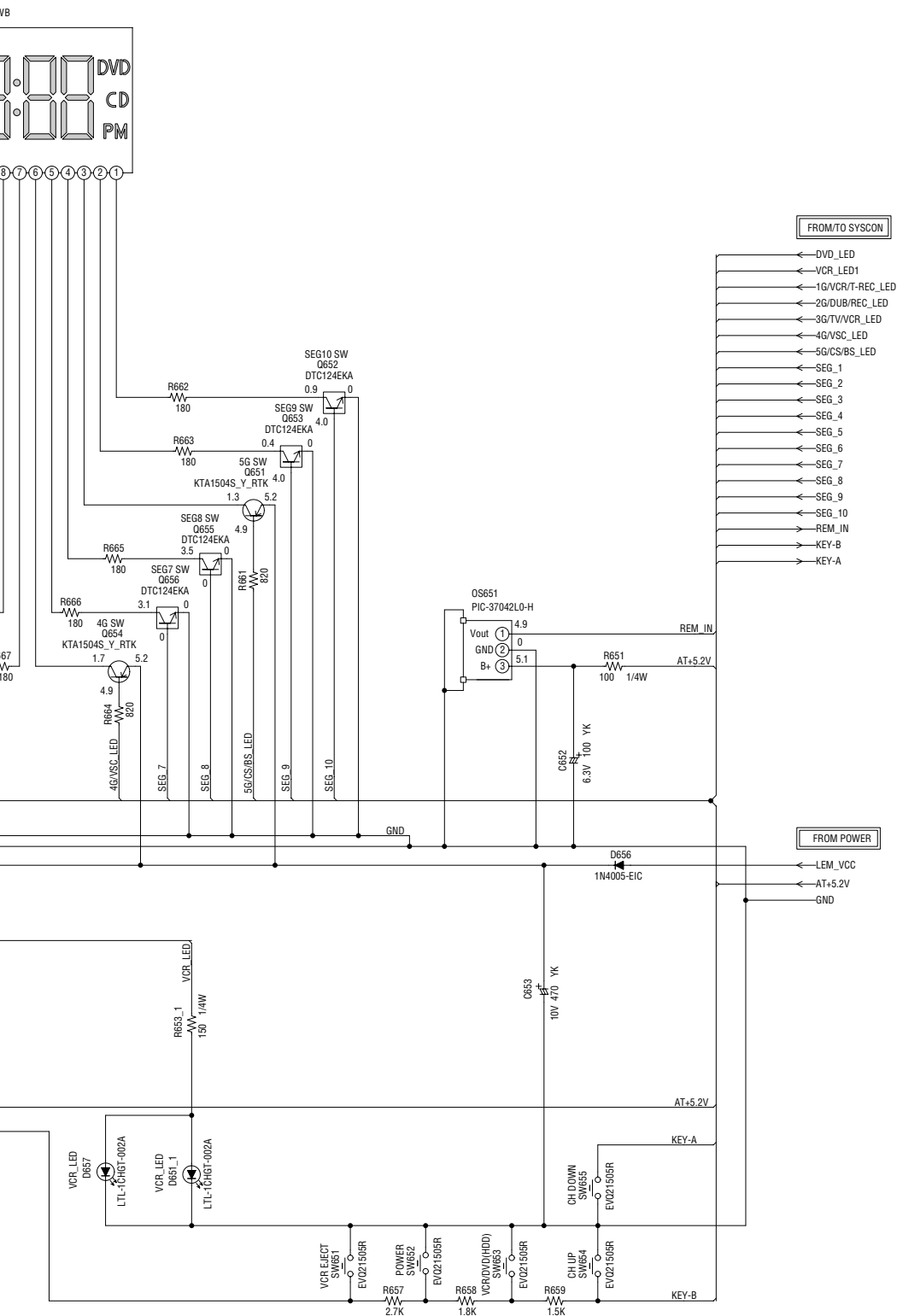
ATTENTION - LES PIECES REPARÉES PAR UN ÉTANT
DANGEREUSES AU POINT DE VUE SÉCURITÉ
N'UTILISER QUE CELLES DÉCRITES
DANS LA NOMENCLATURE DES PIÈCES.

PV-D734S/D744S
TUNER/JACK SCHEMATIC DIAGRAM

20.8. OPERATION/DISPLAY SCHEMATIC DIAGRAM



CB)



NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

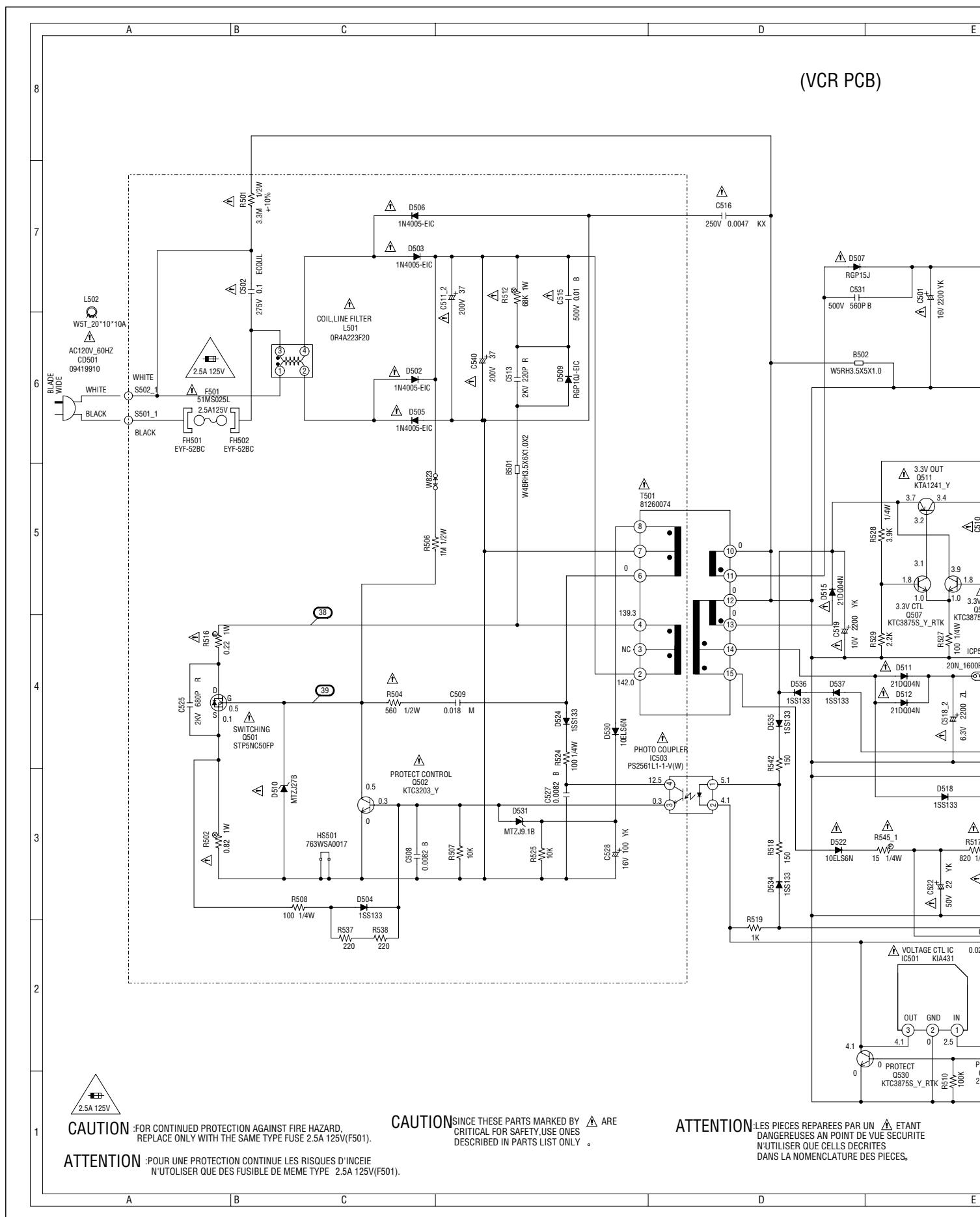
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

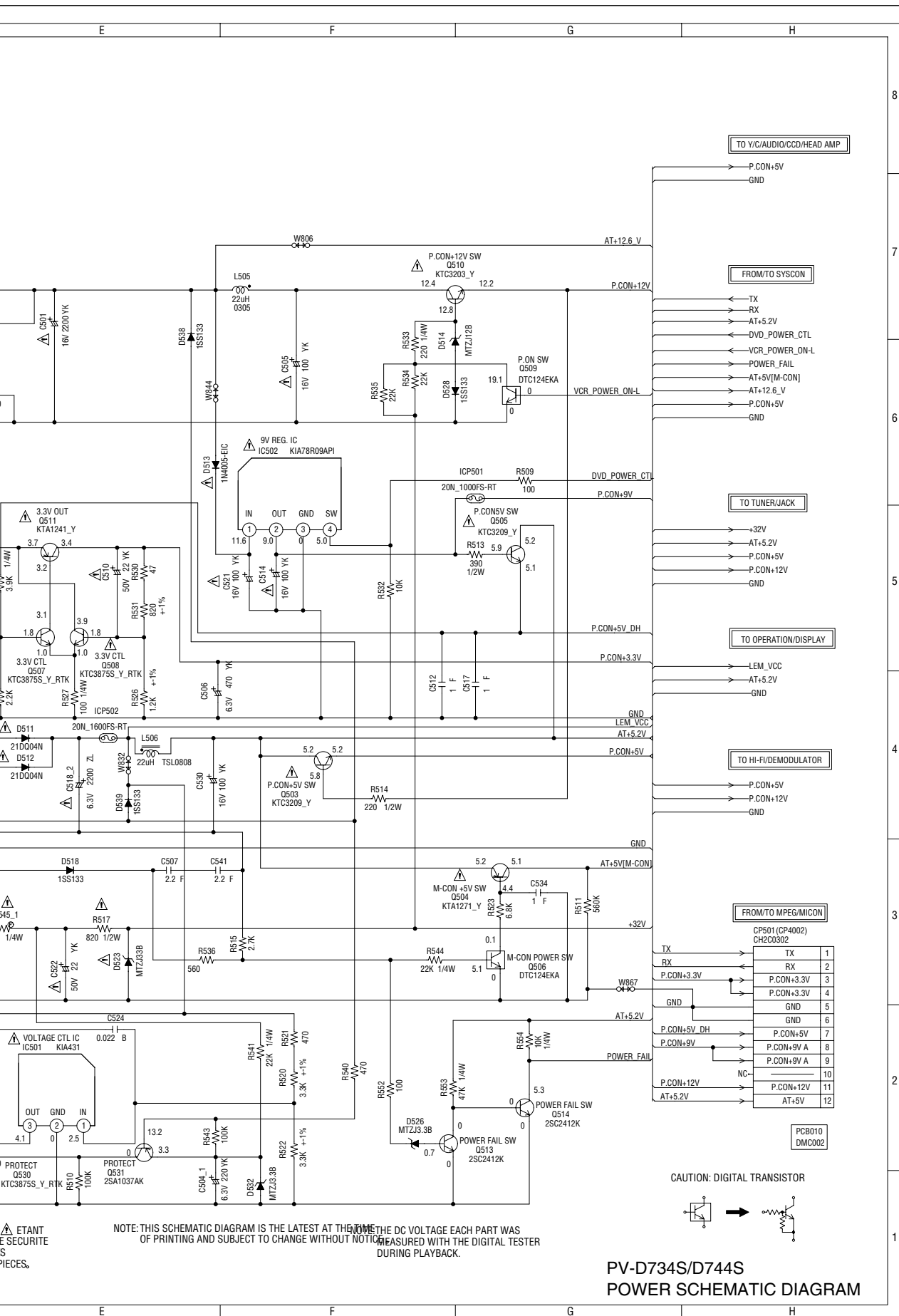
PV-D734S/D744S OPERATION/DISPLAY SCHEMATIC DIAGRAM

PCB010
DMC002



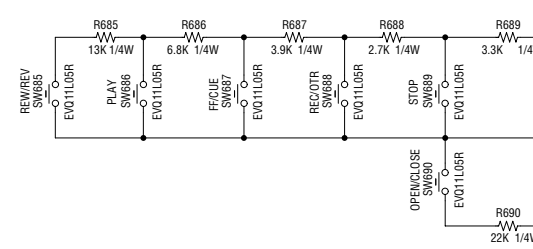
20.10. POWER SCHEMATIC DIAGRAM





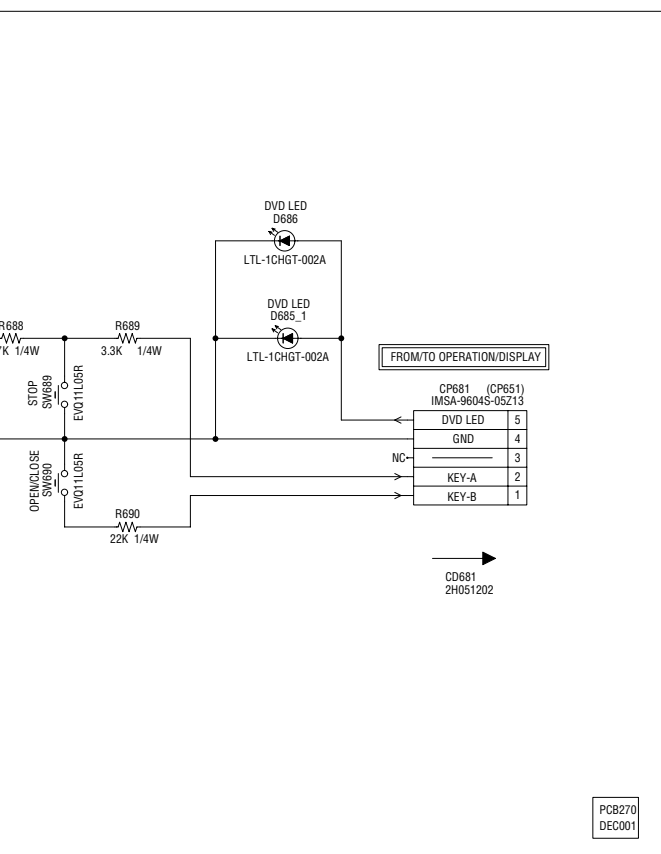
20.11. OPERATION/LED SCHEMATIC DIAGRAM

(OPERATION PCB)



NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

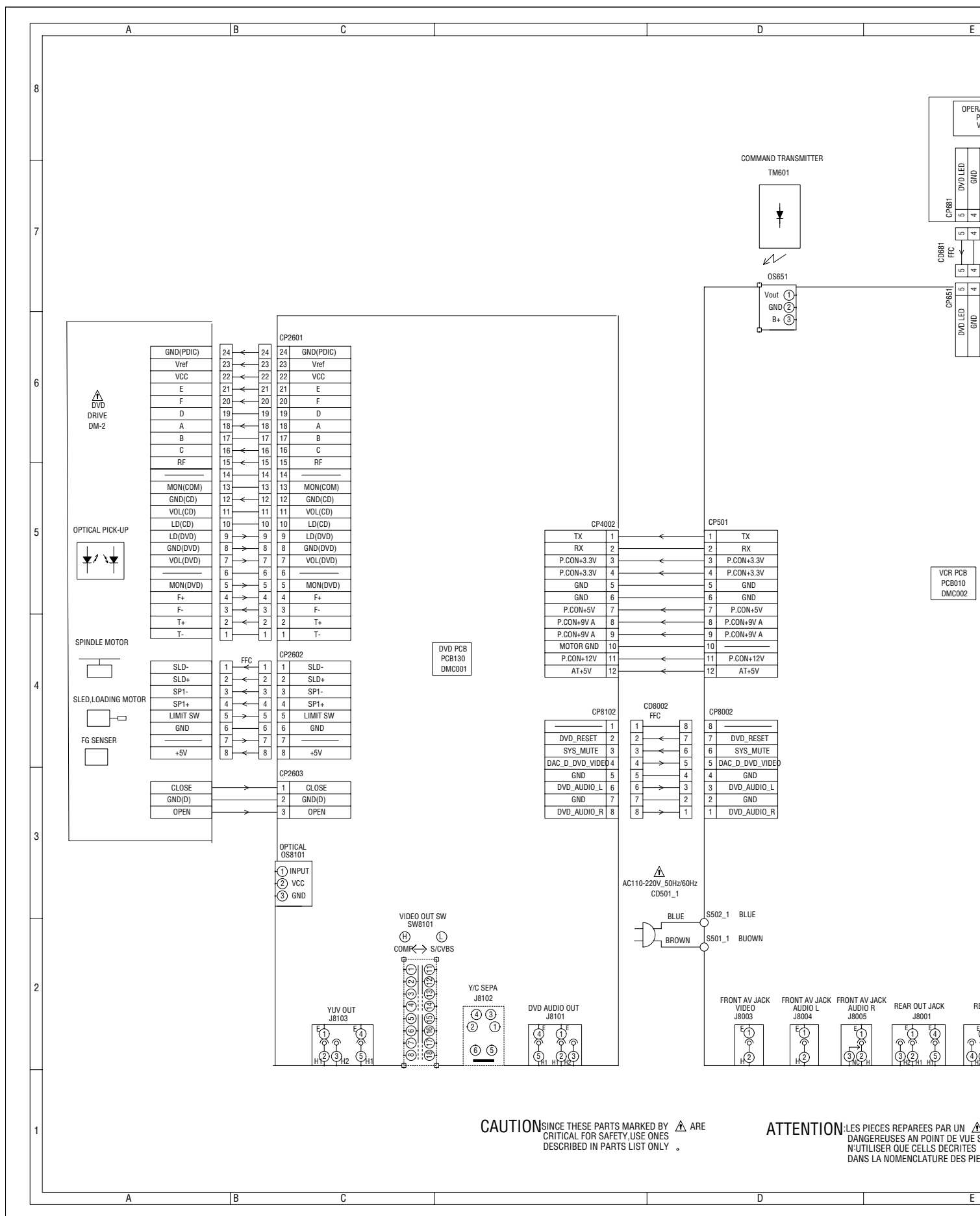
ATION PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME
OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

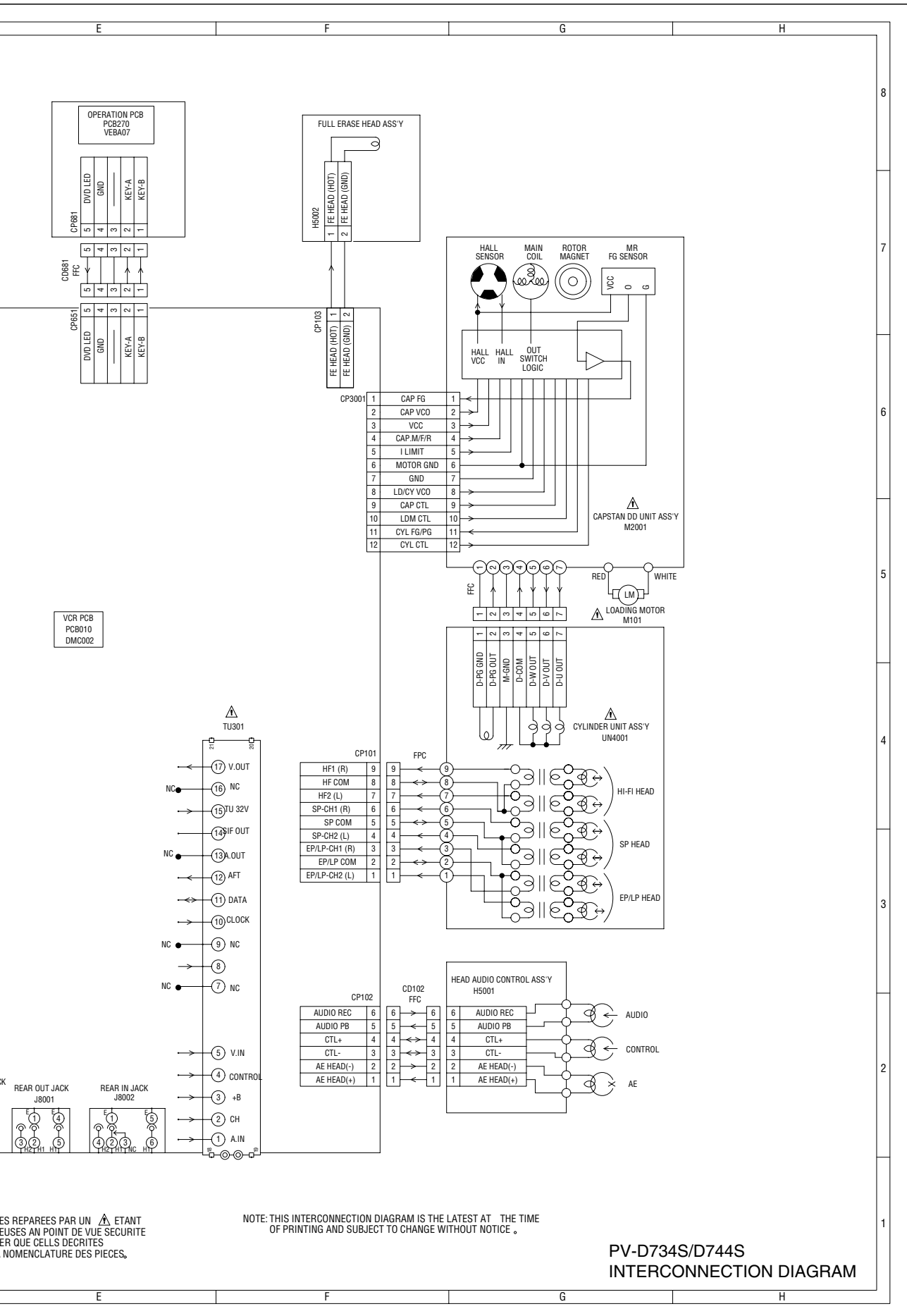
PV-D734S/D744S
OPERATION/LED SCHEMATIC DIAGRAM

20.12. INTERCONNECTION DIAGRAM



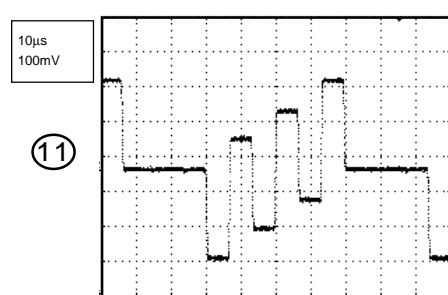
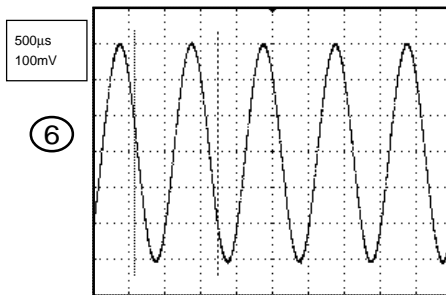
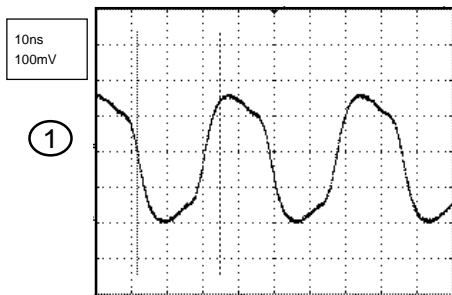
CAUTION SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

ATTENTION LES PIECES REPARÉES PAR UN DANGEREUSES AN POINT DE VUE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES.

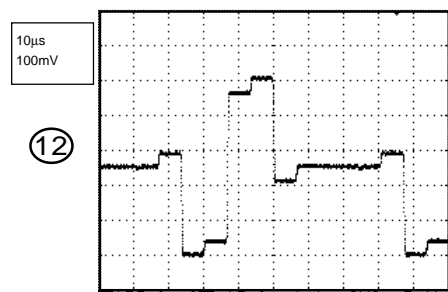
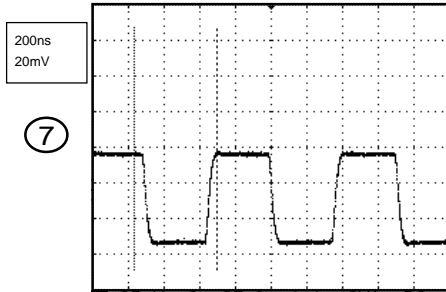
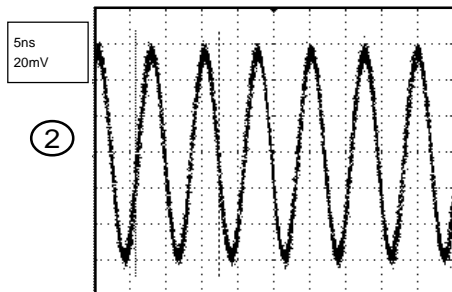


REPARÉES PAR UN ETANT
EN UN POINT DE VUE SECURITE
ER QUE CELLS DECRITES
NOMENCLATURE DES PIECES.

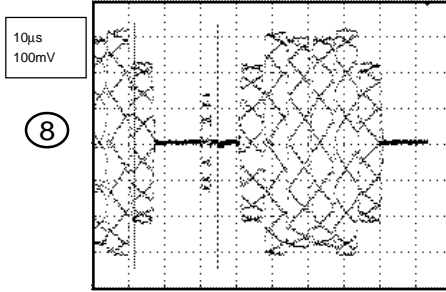
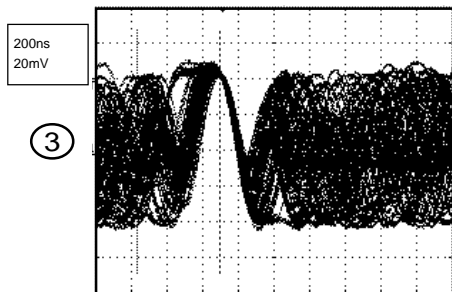
MPEG/MICON



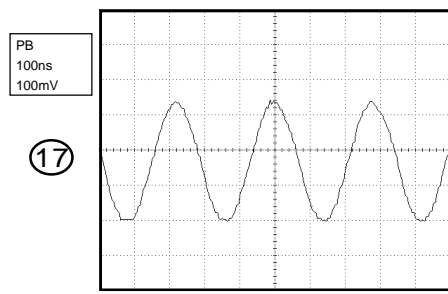
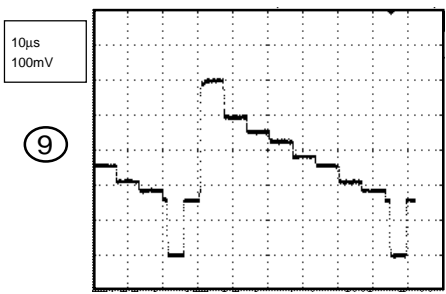
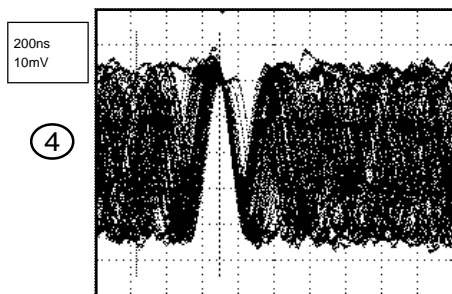
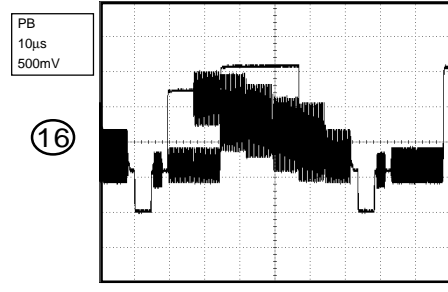
MEMORY



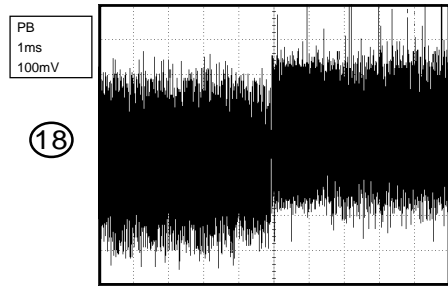
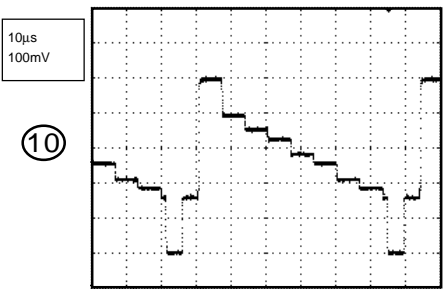
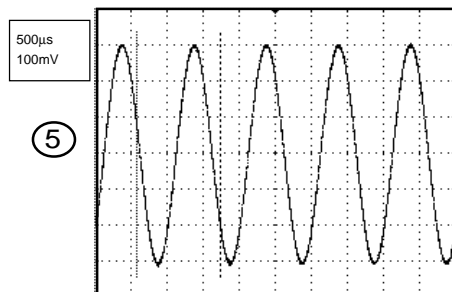
RF AMP/DSP



Y/C/AUDIO/CCD/HEAD AMP



AUDIO/VIDEO

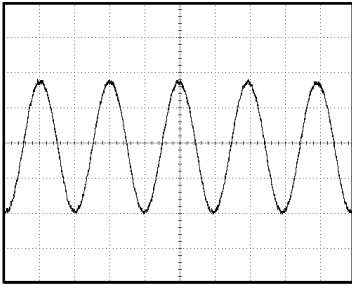


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

POWER

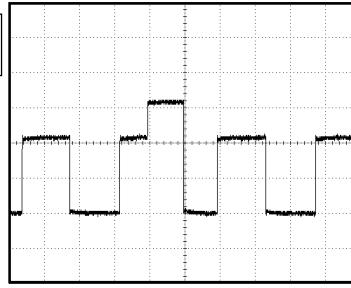
PB
200ms
500mV

(19)



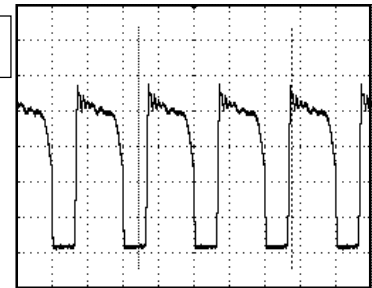
PB
500μs
1.0V

(24)



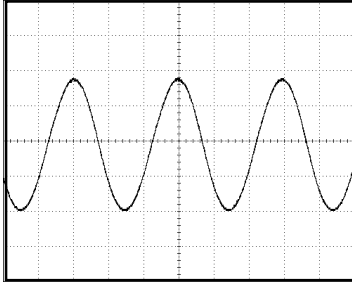
5μs
500mV

(38)



REC
5μs
20V

(20)



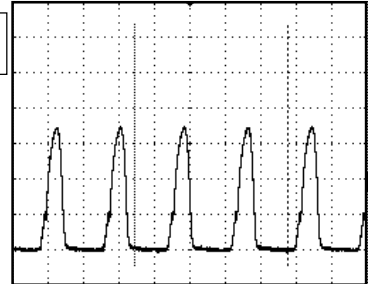
PB
5ms
500mV

(25)



5μs
5.0V

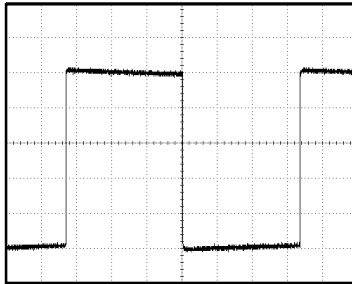
(39)



SYSCON

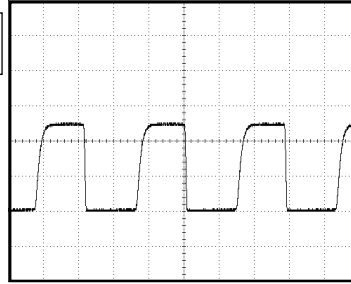
PB
5ms
1.0V

(21)



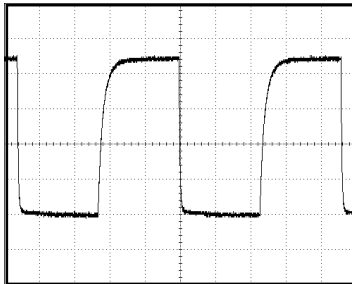
PB
5ms
2.0V

(27)



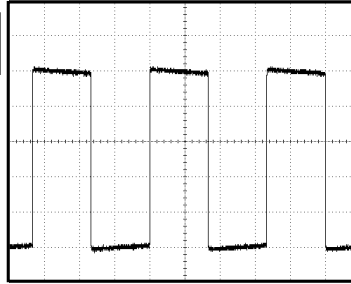
PB
200μs
1.0V

(22)



PB
10ms
1.0V

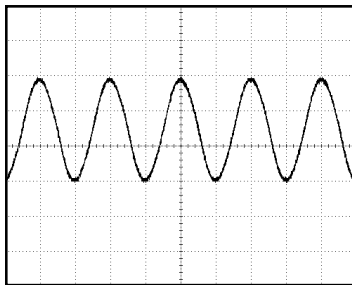
(28)



HI-FI/DEMODULATOR

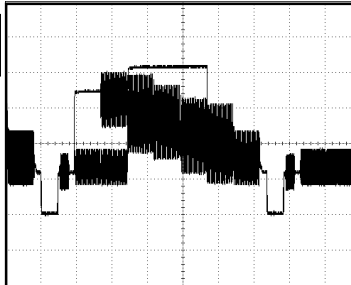
POWER ON
50ns
1.0V

(23)



10μs
200mV

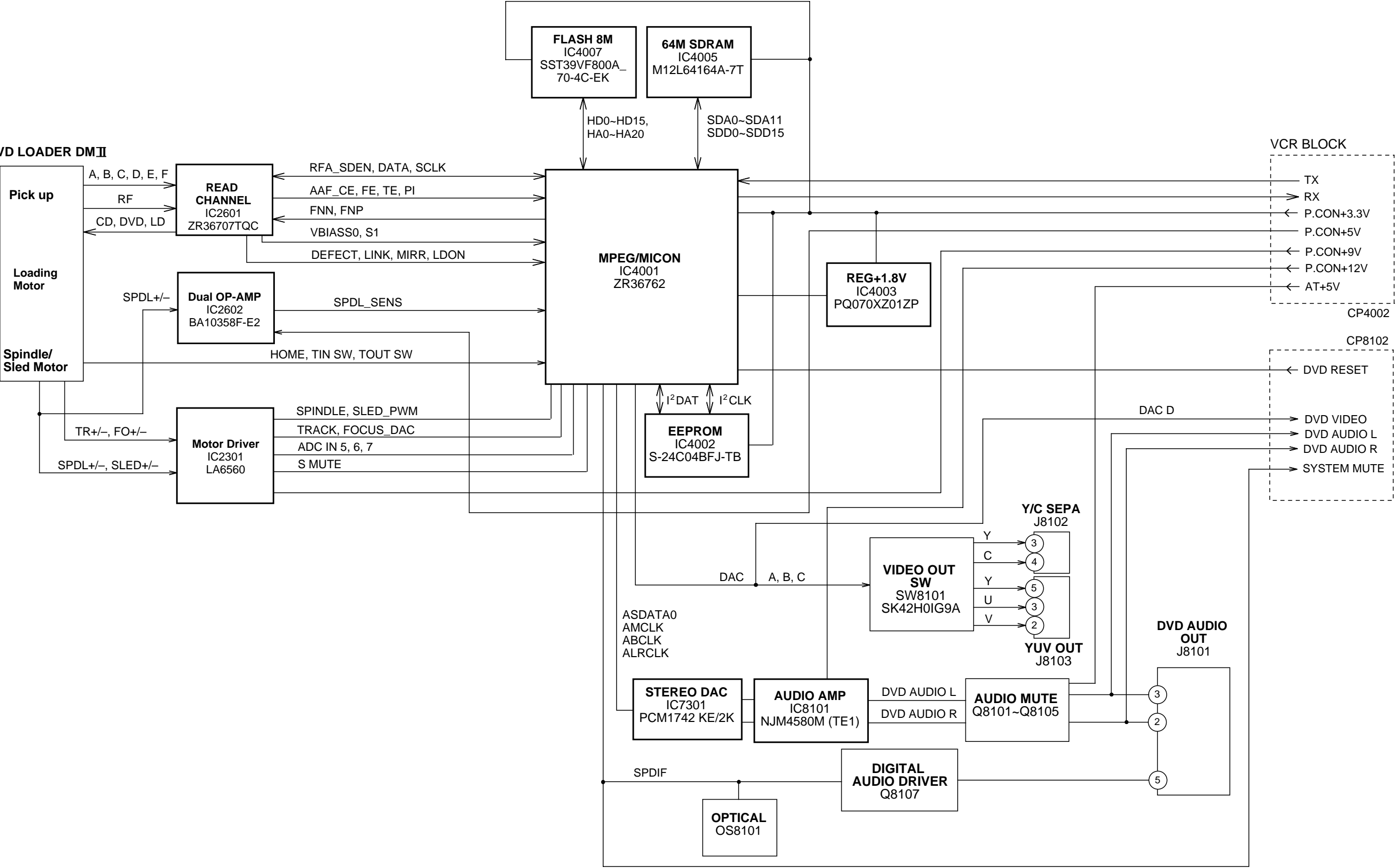
(32)

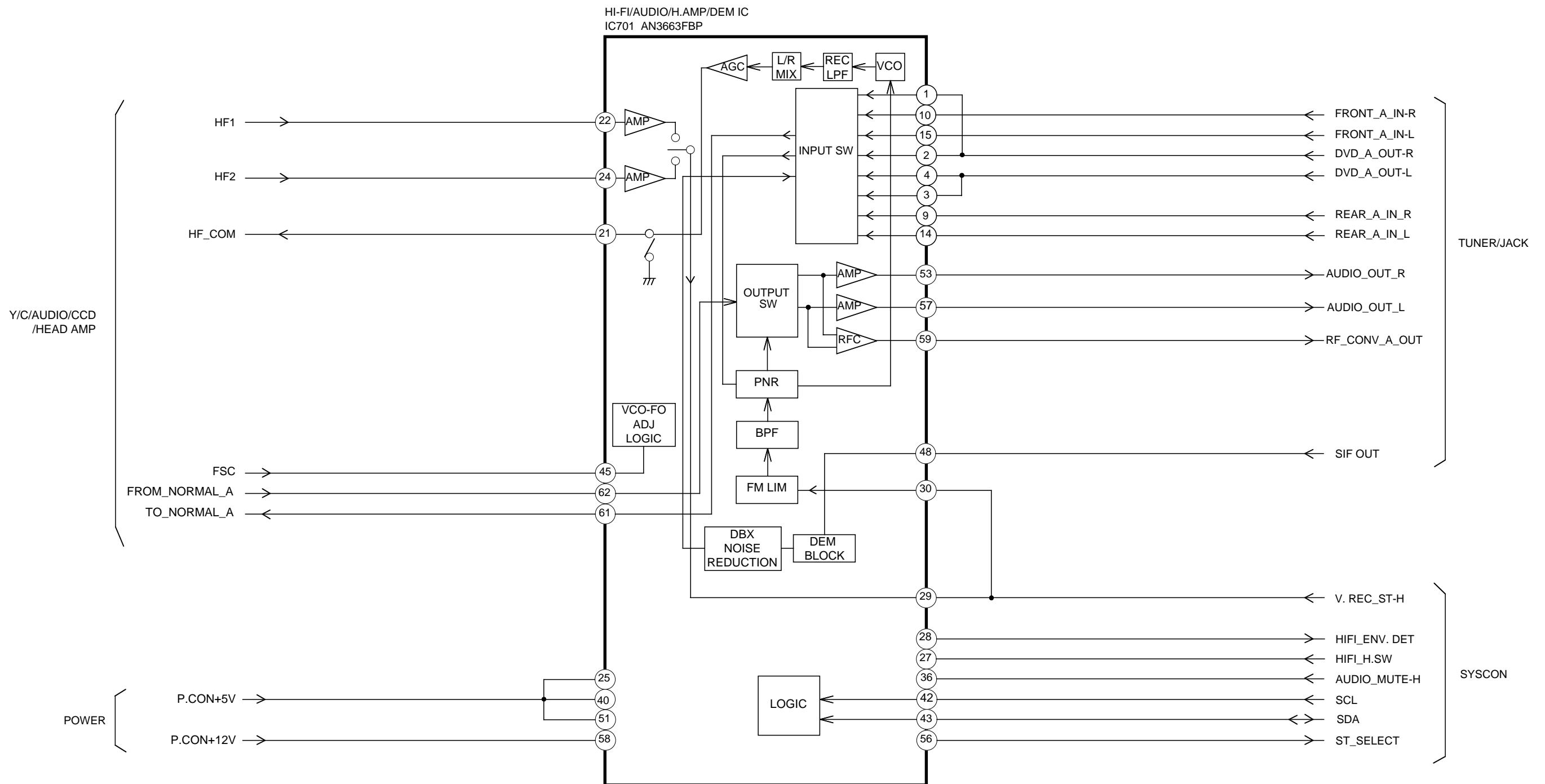


TUNER/JACK

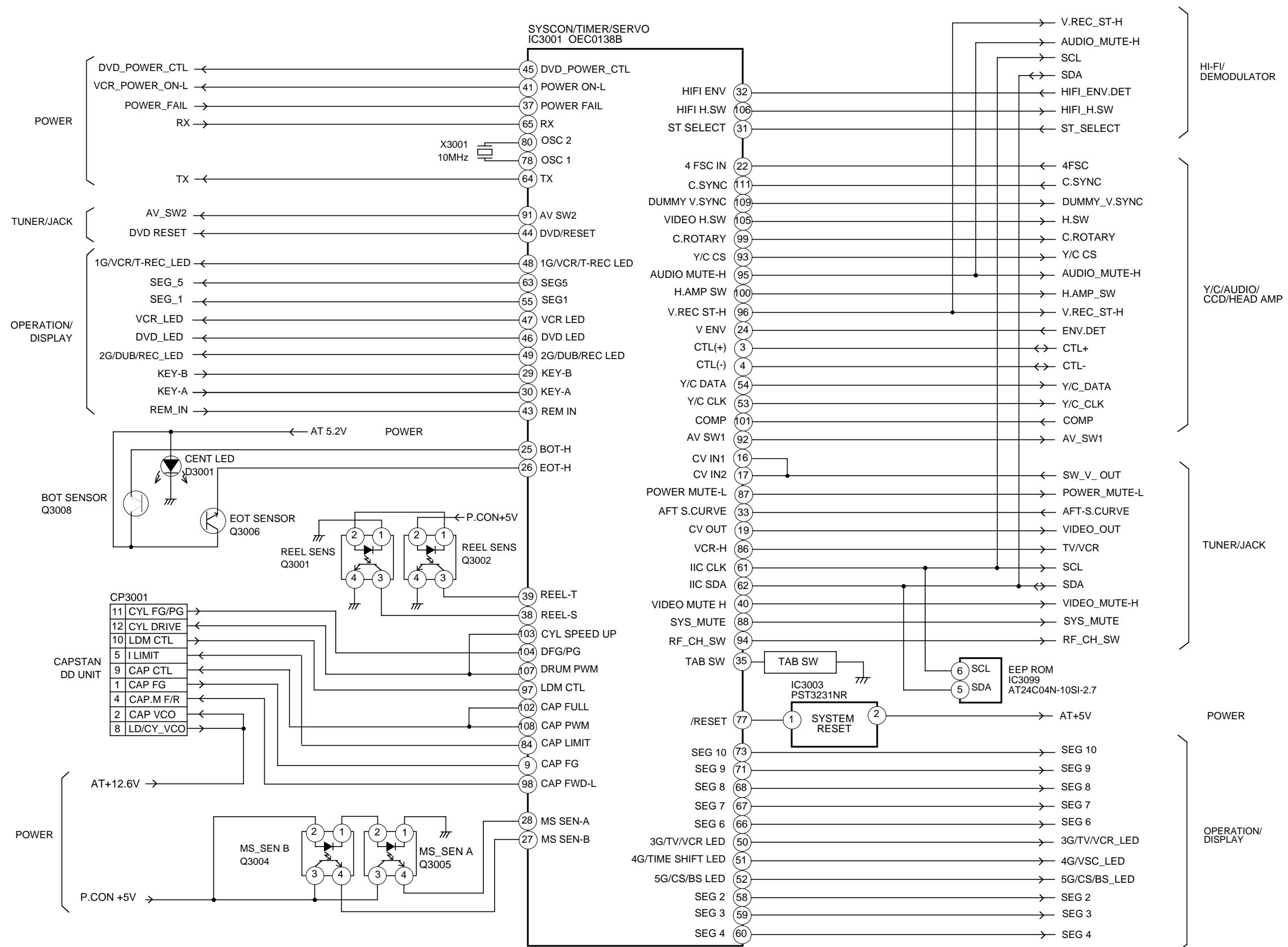
NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

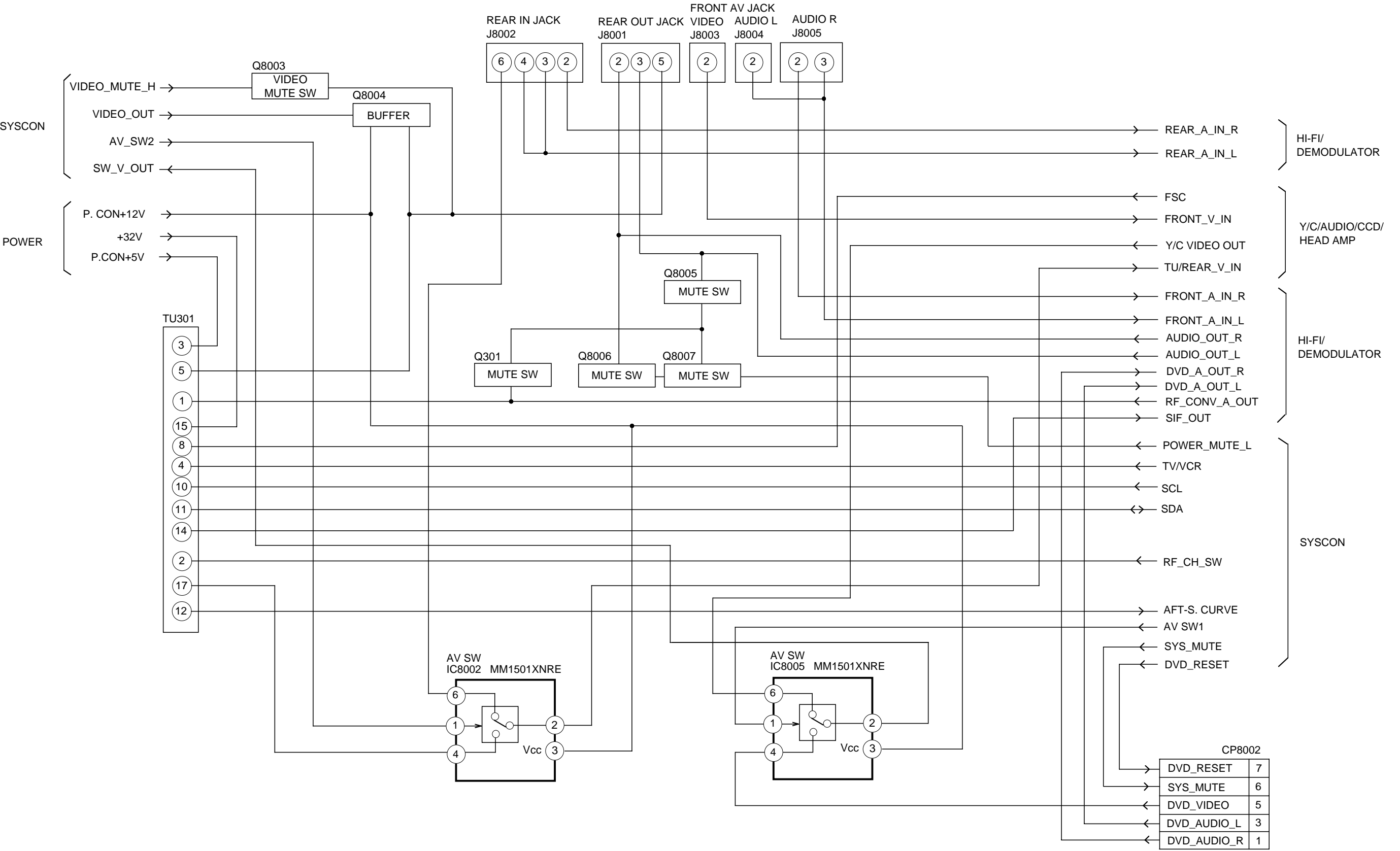
DVD LOADER DMII

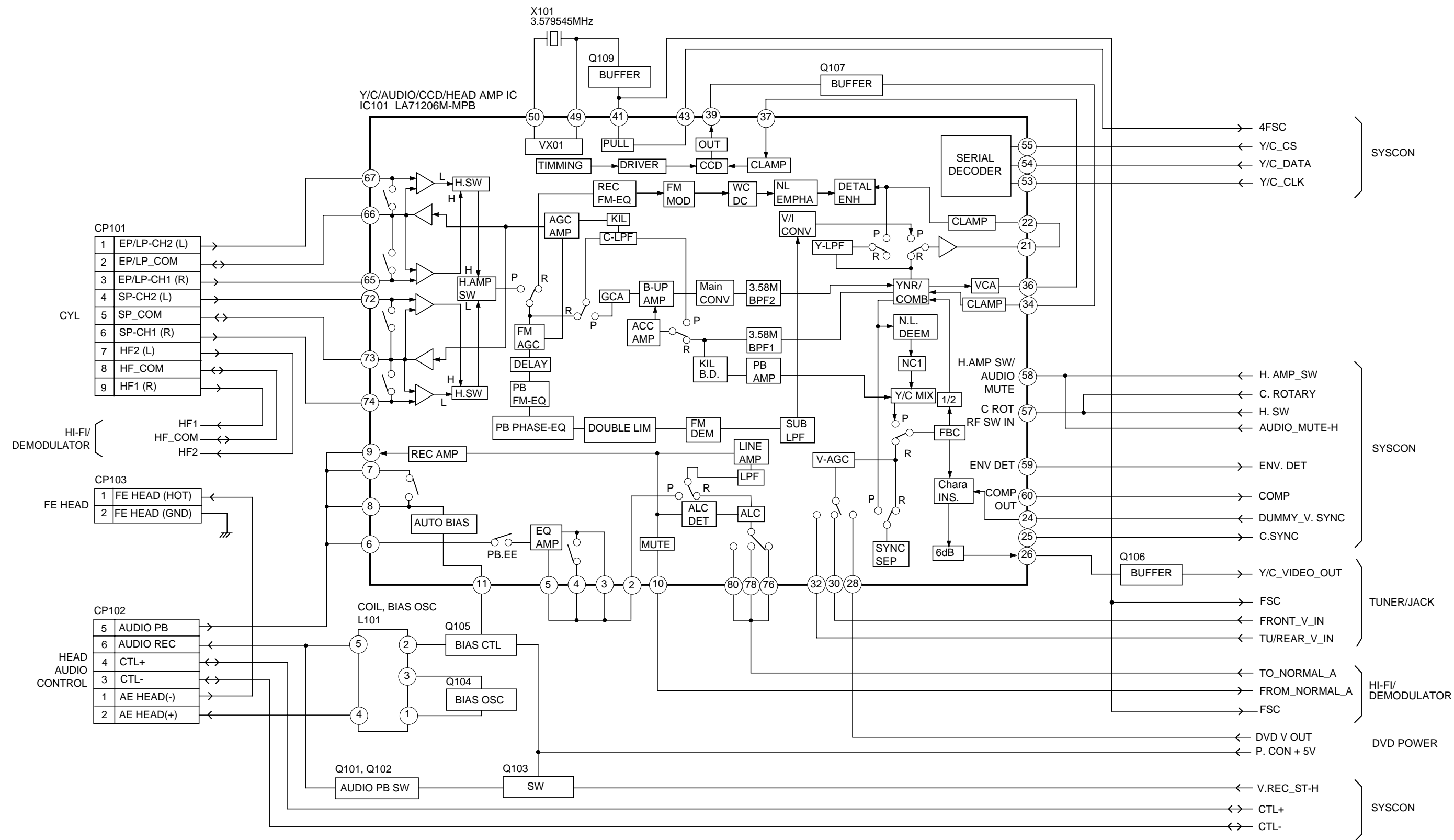












G-1	Outline of the product		DVD Video Player & VHS Player/Recorder
G-2	DVD System	Color System	NTSC
		Disc	DVD, CD-DA, CD-R/RW
		Disc Diameter	120 mm , 80 mm
		Deck	Front Disc Loading
		Disc Loading System	2 Motors
		Pick up	1-Lens 2-Beams System
		Playback time (Max)	DVD 1-Layer 135min (4.7GB) DVD 2-Layer 245min (8.5GB) CD 74min VIDEO CD --
		Search speed	Fwd 2-20 times / 4 step 2-45 times (DVD) 4-40 times (CD)
			Rev 2-20 times / 4 step 2-45 times (DVD) 4-40 times (CD)
		Slow speed	Fwd 1/7-1/2 times --
			Rev 1/7-1/2 times --
G-3	VCR System	System	VHS Player/Recorder
		Video System	NTSC
		Hi-Fi STEREO	Yes
		NTSC PB(PAL60Hz)	No
		Deck	OVD-7 Front 3
		DECK Loading System	
		Motor	
		Heads	Video Head 4Head
		FM Audio Head	2Head
		Audio /Control	Mono/Yes
		Erase (Full Track Erase)	Yes
		Tape Rec	PAL - NTSC SP/SLP
		Speed Play	PAL - NTSC SP/LP/SLP
		Fast Forward / Rewind Time (Approx.) at 25oC	FF:1'48"/REW:1'48"
		with Cassette	T-120 SP/LP/SLP = 3x,5x / 7x,9x / 9x,15x
G-4	Tuning System	Broadcasting System	US System M
		Tuner and Receive CH	1Tuner
		System Destination	US (w/CATV)
		Tuning System	F-Synth
		Input Impedance	VHF/UHF 75 OHM
		CH Coverage	2~69,4A,A-5~A-1,A~I J~W,W+1-W+84
		Intermediate Frequency	Picture (FP) 45.75 MHz Sound (FS) 41.25 MHz FP-FS 4.50 MHz
		Preset CH	-
		RF Converter Output	Yes
		Channel	3 or 4 ch
		Level/Impedance	66 dBu / 75 Ohm
		Sound Selector	No
		Stereo/Dual TV Sound	US-ST
		Tuner Sound Muting	Yes
G-5	Power	Power Source	AC 120V 60Hz DC -
		Power Consumption	18 W at 120V 60Hz 2 W at 120V 60Hz -- W
		Stand by Per Year	
		Protector	Power Fuse Yes
G-6	Regulation	Safety	UL
		Radiation	FCC
		Laser	DHHS
G-7	Temperature	Operation	5oC - 40oC
		Storage	-20oC - 60oC
G-8	Operating Humidity		Less than 80% RH

G-9	Signal	Video Signal	Output Level	1 V p-p/75 ohm (DVD, VCR)	
			S/N Ratio (Weighted)	65 dB (DVD)	50 dB (VCR)
			Horizontal Resolution	500 Lines (DVD)	230 Lines (VCR Mode)
		RGB Signal	Output Level	-	
		Audio Signal	Input Level Microphone	-	
			Input Level Line	-8 dBm/ 50k ohm (VCR)	
			Output Level Line	-8 dBm/ 1k ohm (VCR, 0dBm=0.775Vrms) -12dBm/ 1k ohm (DVD, -20dBfs 0dBfs=2.0Vrms)	
			Digital Output Level	0.5 V p-p / 75 ohm (DVD)	
			S/N Ratio at (Weighted)	90dB (DVD), 42dB (VCR at SP)	
			Harmonic Distortion (1KHz) Typical	0.02% (DVD), 1.5% (VCR at SP)	
			Frequency Response : DVD Mode at DVD	4 Hz - 22 KHz	
			DVD Mode at VIDEO CD	-	
			DVD Mode at CD	4 Hz - 20 KHz	
			VCR Mode at SP	100Hz - 10kHz	
			VCR Mode at LP	-	
			VCR Mode at SLP	100Hz - 4kHz	
		Hi-Fi Audio Signal	Dynamic Range : More than	90dB	
			Frequency Response	20Hz ~20kHz	
			Wow And Flutter : Less than	0.01 %Wrms	
			Channel Separation : More than	60 dB	
			Harmonic Distortion : Less than	0.01	

G-10	On Screen Display (DVD)	Menu			Yes
			Menu Type		Character
			Language		Yes
			Menu		Yes
			Sub Title		Yes
			Audio		Yes
			Picture		Yes
			TV Screen Size		Yes
			OSD Display On/Off		Yes
			JPEG Interval		Yes
			Select Files		Yes
			Sound		Yes
			DRC (Dynamic Range Control)		Yes
			dts Decode		No
			Output (5.1ch/2ch)		No
			Surround On/Off		No
			Center On/Off		No
			Sub Woofer On/Off		No
			Parental		Yes
			Password Lock/Unlock		Yes
			Rating Level		Yes
			Other		Yes
			OSD Language (Set up Language)		Yes
			Output (RGB/Composite)		No
			Open		Yes
			Close		Yes
			No disc		Yes
			Reading		Yes
			Play		Yes
			Still/Pause		Yes
			Stop		Yes
			Prohibit Mark		Yes
			Step		Yes
			Skip (>>)		Yes
			Skip (<<)		Yes
			Random		Yes (CD, MP3, JPEG)
			Repeat		Yes
			Slow+ ##		Yes
			Slow- ##		No
			Search+ ##		Yes
			Search- ##		Yes
			Jump		Yes
			Resume		Yes
			Title No.		Yes
			Chapter No.		Yes
			Track No.		Yes
			Time		Yes
			Sub Title No.		Yes
			Angle No.		Yes
			Vocal On/Off		Yes
			Audio No.		Yes
			Audio Stereo L/R		No
			Zoom		Yes
			Marker No.		Yes
			Spatializer (N-2-2)		No
			Program Play Back		Yes (CD, MP3, JPEG)
			MP3/JPEG	Folder Name	Yes
				File Name	Yes
				File No	Yes
				Time	Yes
				Track No	Yes
			Progressive Scan Out ON/OFF		Yes

	On Screen Display (VCR)	Menu		Yes
		Menu Type		Character
		Timer Rec Set		Yes
		Auto Repeat On/Off		Yes
		SAP On/Off		Yes
		CH Set-Up		Yes
		TV/CATV		Yes
		Auto CH Memory		Yes
		Add/Delete		Yes
		System Set Up		Yes
		Clock Set		Yes (Calendar 12H)
		Language		Yes
		No Noise Back Ground (Weak Signal Display)		Yes
		Auto Clock		Yes
		Standard Time		Yes
		Daylight Saving Time		Yes
		G-CODE (or SHOWVIEW or PLUSCODE) No. Entry		No
		Stereo, Audio Output, SAP		Yes
		Play/Stop/FF/Rew/Rec/OTR (ITR)/T-Rec/Pause/Eject/Tape In (Symbol Mark)		Yes
		CH/AV (LINE)		Yes
		Clock		Yes
		Repeat		Yes
		Tape Counter		Yes
		Index		Yes
		Tape Speed		Yes
		ATR / Manual Tracking		Yes
		Hi-Fi		Yes
		Zero Return		Yes
G-11	OSD Language	DVD OSD		Eng Fre Spa
		VCR OSD		Eng Fre Spa
G-12	Clock, Timer and Timer Back-up	Calendar		1990/1/1 ~ 2081/12/31
		Timer Events		8 Program/ 1 Month
		One Touch Recording Max Time		6 Hours
		OTPB Valid Time		No
		Timer Back-up (at Power Off Mode)		5 sec
G-13	Display	DISPLAY		Yes
		DISPLAY type		LED Module (Green, "Rec" &Timer symbol = Red)
		Clock/Counter, CH, Timer Rec, OTR, Play Rec, FF (Cue), Rew (Rev), Stop, ATR, Eject VCR		No
		DVD		Yes
		CD		Yes
		Clock		Yes (12h)
		AM PM		No
		Counter VCR		Yes (hour: min)
		DVD		Yes (hour: min)
		CD		Yes (min: sec)
		Eject		Yes
		Counter Remain		No
		Play		Yes
		Stop		No
		Rec		Yes
		FF / Cue		No
		REW /Review		No
		Pause/Still		Yes
		OTR		No
		T-Rec		Yes
		Chapter		No
		TITLE		No
		TRACK		Yes
		Repeat		No
		Hi-Fi		No
		SP		No
		LP		No
		SLP		No
		CH		Yes
		RF Output CH		Yes
		Tape In		Yes
		Remocon Custom Code		No
		Progressive Scan Out		Yes

G-14	Remote Control	Unit	RC-HR
		Glow in Dark Remocon	No
		Format	KASEIKYO
		Custom Code	8-00h, 9-00h, 9-01h, 9-05h, B-00h
		Power Source	3V
		Voltage (D.C)	UM-4 x 2 pcs
		UM size x pcs	
		Total Keys	54 Keys
		Keys	
		POWER	Yes
		VCR/DVD	Yes
		EJECT	Yes
		OPEN/CLOSE	Yes
		1	Yes
		2	Yes
		3	Yes
		4	Yes
		5	Yes
		6	Yes
		7	Yes
		8	Yes
		9	Yes
		0	Yes
		INPUT SELECT	No
		INPUT SELECT/PROGRESSIVE	Yes
		TV/VCR	Yes
		CLOCK/COUNTER	Yes
		DISPLAY/CALL	Yes
		DVD MENU	Yes
		SETUP MENU/VCR MENU	Yes
		UP/CH+	Yes
		DOWN/CH-	Yes
		RIGHT/SET+/TRACKING+	Yes
		LEFT/SET-/TRACKING-	Yes
		ENTER/SELECT	Yes
		RETURN	Yes
		CANCEL/CLEAR	Yes
		STOP	Yes
		PLAY	Yes
		PAUSE/STILL/STEP	Yes
		SKIP+/INDEX+	Yes
		SKIP-/INDEX-	Yes
		FF (Cue)/SEARCH+	Yes
		REW (Review)/SEARCH-	Yes
		MARKER	Yes
		CM SKIP	Yes
		SLOW+	Yes
		SLOW-	Yes
		ANGLE/COUNTER RESET	Yes
		AUDIO / AUDIO SELECT	Yes
		SUB TITLE/ATR	Yes
		ZOOM	Yes
		PLAY MODE/SPEED	Yes
		JUMP/ZERO RETURN	Yes
		REPEAT A-B	Yes
		TITLE (TOP MENU)	Yes
		T-REC (PROG TIMER)	Yes
		REC/OTR	Yes
		TV VOL+	Yes
		TV VOL-	Yes
		TV CH+	Yes
		TV CH-	Yes
		TV POWER	Yes
		TV INPUT	Yes

G-15	Features (DVD)	Auto Power Off			No
		Parental Lock		Yes	
		Video CD Playback			No
		MP3 Playback		Yes	
		WMA Playback			No
		JPEG Playback		Yes	
		Progressive Scan Out		Yes	
		Digital Out	Dolby Digital	Yes	
			MPEG	Yes	
			PCM	Yes	
			DTS	Yes	
		Down Mix Out	(Dolby Digital)	Yes	
			(DTS)		No
		Spatializer (N-2-2)			No
		Screen Saver			No
		Auto Stop			No
		Tray Lock		Yes	
		Audio DAC		192kHz / 24bit	
	Features (VCR)	Auto Head Cleaning		Yes	
		Auto Tracking		Yes	
		HQ (VHS Standard High Quality)		Yes	
		Auto Power On, Auto Play, Auto Rewind, Auto Eject		Yes	
		Auto Power Off			No
		Forward/Reverse Picture Search		Yes	
		VIDEO PLUS+ (SHOWVIEW, G-CODE)			No
		One Touch Playback			No
		Auto CH Memory		Yes	
		AREA CODE			No
		Auto Clock Set		Yes	
		Index Search		Yes	
		SQPB (Option)			No
		CATV		Yes	
		Energy Star		Yes	
		MTS (SAP)		Yes	
		CM Skip (30sec x 6 Times)		Yes	
		Copy Disc to Tape			No
G-16	Accessories	Owner's Manual	Language	English	
			w/Guarantee Card	Yes	
			Buyer Model No.	PV-D744S	
		Remote Control Unit		Yes	
		Guarantee Card			No
		Registration Card		Yes	
		Owner Information Card (MATSUSHITA Only)		Yes	
		Warning Sheet			No
		Service Station List			No
		Important Tag			No
		AC Plug Adapter			No
		Quick Set-up Sheet			No
		Battery	Yes		
			UM size x pcs	UM-4 x 2 pcs	
			OEM Brand	Yes (Panasonic)	
		AC Cord			No
		AV Cord (1.2m)			No
		75 Ohm Coaxial Cable (0.9m)		Yes	
		S-Video Cable			No
		21pin cable			No
		800 No Sticker			No
		Toll Free Insert Sheet			No
		Safety Tip			No

G-17	Interface	Switch	Front	Power	Yes		
				Play	Yes		
				Eject (VCR)	Yes		
				Stop	Yes		
				Rec/OTR	Yes		
				Open/Close (DVD)	Yes		
				CH +	Yes		
				CH -	Yes		
				FF/ Search(>>)	Yes		
				Rew/Search(<<)	Yes		
				Still/Pause	No		
				Shuttle (Search/REV/FWD)	No		
				DVD/VCR	Yes		
				Main Power SW	No		
		Rear	Attenuator	No			
			S-Video/Component Video Selector	Yes			
			RF Out (Slide SW)	No			
			Main Power SW	No			
			Volume	Phones Volume	No		
				Mic Volume	No		
				Echo Volume	No		
				Rec/OTR	No		
			Terminals	Front	Video In	RCA x 1 (Black)	
					Audio In	RCA x 2 (Stereo, Black)	
		Rear		Video Output	RCA x1 (Yellow) S-Video x 1 (DVD Signal Only) Component x1 (RCA 3pin, DVD Signal Only)		
				Audio Output	RCA x 4 (Stereo, Red/White) Coaxial x 1 (Digital Audio, DVD Signal Only)		
				Optical Out (Option)	Yes (Digital Audio, DVD Signal Only)		
				Video Input (Option)	RCA x 1 (Yellow)		
				Audio Input (Option)	RCA x 2 (Stereo, Red/White)		
				RF Input / Output	Yes		
				Euro Scart	No		
				AC Inlet	No		
				Indicator	LED	Power	No
						Rec	No
						T-Rec	No
						TV/VCR	No
						DVD	Yes (GREEN)
						VCR	Yes (GREEN)
		Surround	No				
		Level Meter	No				
G-18	Set Size		Approx. W x D x H (mm)	430 x 250 x 99			
G-19	Weight		Net (Approx.)	3.6kg (7.9lbs)			
			Gross (Approx.)	4.7kg (10.4lbs)			
G-20	Carton	Master Carton		No			
			Content	--- Sets			
			Material	--- / ---			
			Dimensions W x D x H (mm)	---			
			Description of Origin	---			
		Gift Box		Yes			
			Material	Double/White			
			W/Color Photo Label	No			
			Dimensions W x D x H (mm)	497 x 360 x 180			
			Design	As Per BUYER 's			
			Description of Origin	Yes			
			Buyer Model No.	PV-D744S			
		Drop Test	Natural Dropping At	1 Corner / 3 Edges / 6 Surfaces			
			Height (cm)	80 cm			
		Container Stuffing		1,985 Sets/40' container			
G-21	Cabinet Material	Cabinet	Front	PS 94V2 or More/DECABROM			
		PCB	Non-Halogen Demand	No			
			Eyelet Demand	No			
G-22	Environment	Pb Free	Lead-free Solder	Yes			
			Other	No			
		Cd Free		No			

1. READ INSTRUCTIONS

All the safety and operating instructions should be read before the unit is operated.

2. RETAIN INSTRUCTIONS

The safety and operating instructions should be retained for future reference.

3. HEED WARNINGS

All warnings on the unit and in the operating instructions should be adhered to.

4. FOLLOW INSTRUCTIONS

All operating and use instructions should be followed.

5. CLEANING

Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. ATTACHMENTS

Do not use attachments not recommended by the unit's manufacturer as they may cause hazards.

7. WATER AND MOISTURE

Do not use this unit near water. For example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

8. ACCESSORIES

Do not place this unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing serious injury, and serious damage to the unit. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer.

8A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

9. VENTILATION

Slots and openings in the cabinet and in the back or bottom are provided for ventilation, to ensure reliable operation of the unit, and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the unit on a bed, sofa, rug, or other similar surface. This unit should never be placed near or over a radiator or heat source. This unit should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

10. POWER SOURCES

This unit should be operated only from the type of power source indicated on the rating plate. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For units intended to operate from battery power, or other sources, refer to the operating instructions.

11. GROUNDING OR POLARIZATION

This unit is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug. If your unit is equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin, this plug will only fit into a grounding-type power outlet. This too, is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

12. POWER-CORD PROTECTION

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

13. LIGHTNING

To protect your unit from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the unit due to lightning and power line surges.

14. POWER LINES

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

15. OVERLOADING

Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.

16. OBJECT AND LIQUID ENTRY

Do not push objects through any openings in this unit, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill or spray any type of liquid into the unit.

17. OUTDOOR ANTENNA GROUNDING

If an outside antenna or cable system is connected to the unit, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

18. SERVICING

Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

PORTABLE CART WARNING
(symbol provided by RETAC)



S3126A

19. DAMAGE REQUIRING SERVICE

Unplug this unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the unit.
- If the unit has been exposed to rain or water.
- If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
- If the unit has been dropped or the cabinet has been damaged.
- When the unit exhibits a distinct change in performance, this indicates a need for service.

20. REPLACEMENT PARTS

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original parts.

Unauthorized substitutions may result in fire, electric shock or other hazards.

21. SAFETY CHECK

Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

22. WALL OR CEILING MOUNTING

The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

23. HEAT

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

24. DISC TRAY

Keep your fingers well clear of the disc tray as it is closing. It may cause serious personal injury.

25. CONNECTING

When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.

26. SOUND VOLUME

Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.

27. SOUND DISTORTION

Do not allow the product output distorted sound for a longtime. It may cause speaker overheating and fire.

28. HEADPHONES

When you use the headphones, keep the volume at a moderate level. If you use the headphones continuously with high volume sound, it may cause hearing damage.

29. LASER BEAM

Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.

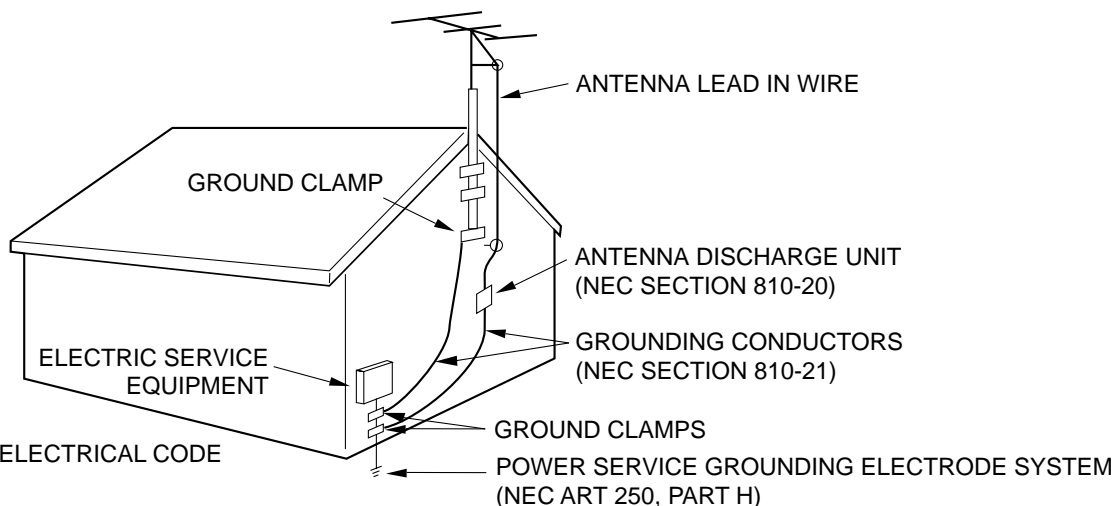
30. DISC

Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

31. NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

EXAMPLE OF ANTENNA GROUNDING AS PER THE NATIONAL ELECTRICAL CODE



A	A/C	: Audio/Control	H.SW	: Head Switch	
	ACC	: Automatic Color Control	Hz	: Hertz	
	AE	: Audio Erase	I	IC	: Integrated Circuit
	AFC	: Automatic Frequency Control		IF	: Intermediate Frequency
	AFT	: Automatic Fine Tuning		IND	: Indicator
	AFT DET	: Automatic Fine Tuning Detect		INV	: Inverter
	AGC	: Automatic Gain Control	K	KIL	: Killer
	AMP	: Amplifier	L	L	: Left
	ANT	: Antenna		LED	: Light Emitting Diode
	A.PB	: Audio Playback		LIMIT AMP	: Limiter Amplifier
	APC	: Automatic Phase Control		LM, LDM	: Loading Motor
	ASS'Y	: Assembly		LP	: Long Play
	AT	: All Time		L.P.F	: Low Pass Filter
	AUTO	: Automatic		LUMI.	: Luminance
	A/V	: Audio/Video	M	M	: Motor
B	BGP	: Burst Gate Pulse		MAX	: Maximum
	BOT	: Beginning of Tape		MINI	: Minimum
	BPF	: Bandpass Filter		MIX	: Mixer, mixing
	BRAKE SOL	: Brake Solenoid		MM	: Monostable Multivibrator
	BUFF	: Buffer		MOD	: Modulator, Modulation
	B/W	: Black and White		MPX	: Multiplexer, Multiplex
C	C	: Capacitance, Collector		MS SW	: Mecha State Switch
	CASE	: Cassette	N	NC	: Non Connection
	CAP	: Capstan		NR	: Noise Reduction
	CARR	: Carrier	O	OSC	: Oscillator
	CH	: Channel		OPE	: Operation
	CLK	: Clock	P	PB	: Playback
	CLOCK (SY-SE)	: Clock (Syscon to Servo)		PB CTL	: Playback Control
	COMB	: Combination, Comb Filter		PB-C	: Playback-Chrominance
	CONV	: Converter		PB-Y	: Playback-Luminance
	CPM	: Capstan Motor		PCB	: Printed Circuit Board
	CTL	: Control		P. CON	: Power Control
	CYL	: Cylinder		PD	: Phase Detector
	CYL-M	: Cylinder-Motor		PG	: Pulse Generator
	CYL SENS	: Cylinder-Sensor		P-P	: Peak-to Peak
D	DATA (SY-CE)	: Data (Syscon to Servo)	R	R	: Right
	dB	: Decibel		REC	: Recording
	DC	: Direct Current		REC-C	: Recording-Chrominance
	DD Unit	: Direct Drive Motor Unit		REC-Y	: Recording-Luminance
	DEMOD	: Demodulator		REEL BRK	: Reel Brake
	DET	: Detector		REEL S	: Reel Sensor
	DEV	: Deviation		REF	: Reference
E	E	: Emitter		REG	: Regulated, Regulator
	EF	: Emitter Follower		REW	: Rewind
	EMPH	: Emphasis		REV, RVS	: Reverse
	ENC	: Encoder		RF	: Radio Frequency
	ENV	: Envelope		RMC	: Remote Control
	EOT	: End of Tape		RY	: Relay
	EQ	: Equalizer	S	S. CLK	: Serial Clock
	EXT	: External		S. COM	: Sensor Common
F	F	: Fuse		S. DATA	: Serial Data
	FBC	: Feed Back Clamp		SEG	: Segment
	FE	: Full Erase		SEL	: Select, Selector
	FF	: Fast Forward, Flipflop		SENS	: Sensor
	FG	: Frequency Generator		SER	: Search Mode
	FL SW	: Front Loading Switch		SI	: Serial Input
	FM	: Frequency Modulation		SIF	: Sound Intermediate Frequency
	FSC	: Frequency Sub Carrier		SO	: Serial Output
	FWD	: Forward		SOL	: Solenoid
G	GEN	: Generator		SP	: Standard Play
	GND	: Ground		STB	: Serial Strobe
H	H.P.F	: High Pass Filter		SW	: Switch

S	SYNC	:	Synchronization
	SYNC SEP	:	Sync Separator, Separation
T	TR	:	Transistor
	TRAC	:	Tracking
	TRICK PB	:	Trick Playback
	TP	:	Test Point
U	UNREG	:	Unregulated
V	V	:	Volt
	VCO	:	Voltage Controlled Oscillator
	VIF	:	Video Intermediate Frequency
	VP	:	Vertical Pulse, Voltage Display
	V.PB	:	Video Playback
	VR	:	Variable Resistor
	V.REC	:	Video Recording
	VSF	:	Visual Search Fast Forward
	VSR	:	Visual Search Rewind
	VSS	:	Voltage Super Source
	V-SYNC	:	Vertical-Synchronization
	VT	:	Voltage Tuning
X	X'TAL	:	Crystal
Y	Y/C	:	Luminance/Chrominance